Access DB# 177341

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Deborah Lambkin Examiner #: 71800 Date: 1/23/06
Art Unit: 1626 Phone Number 30-2-0698 Serial Number: 10/687,496
Mail Box and Bldg/Room Location: Rm 5B09 5C18-box Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

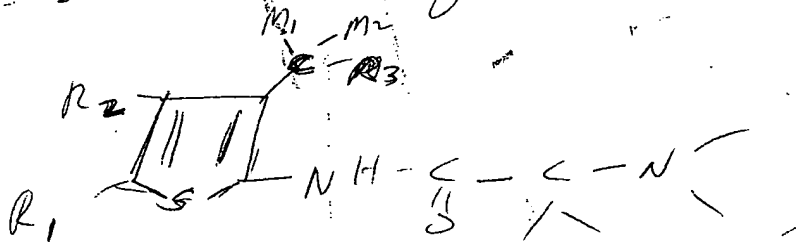
Title of Invention: Novel Anthelmintic & Insecticidal Compds.

Inventors (please provide full names): Byung Hyun Lee

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the following:



RECEIVED
JAN 23 2006
(STIC)

see diskette I attached.

Thanks a lot

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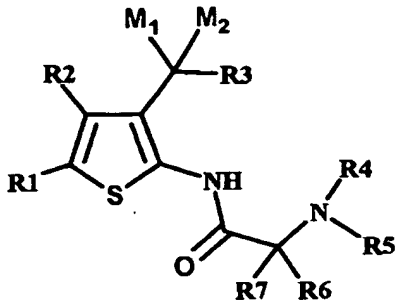
STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: EG	NA Sequence (#)	STN $467.80
Searcher Phone #:	AA Sequence (#)	Dialog
Searcher Location:	Structure (#) ✓ (3)	Questel/Orbit (substructure)
Date Searcher Picked Up:	Bibliographic	Dr.Link
Date Completed: 2-3-06	Litigation	Lexis/Nexis
Searcher Prep & Review Time: 5	Fulltext	Sequence Systems
~~Clerical Prep Time:~~	Patent Family	WWW/Internet
Online Time: 75	Other	Other (specify)

PTO-1590 (8-01)

WHAT IS CLAIMED IS:

1. A compound of Formula I comprising:



Formula I

wherein:

R_1 and R_2 are selected from the group consisting of H, alkyl, phenyl, substituted phenyl, benzyl, substituted benzyl, heteroaryl, substituted heteroaryl, hetroarylmethylene, and substituted hetroarylmethylene; or

R_1 and R_2, along with the carbons to which they are attached, may form a 5- to 10-membered substituted or unsubstituted carbocyclic or heterocycloalkyl ring;

R_3 is alkyl, heteroalkyl, cycloalkyl, substituted or unsubstituted aryl, or substituted or unsubstituted heteroaryl;

R_4 and R_5 are independently H, alkyl, heteroalkyl, cycloalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

R_4 and R_5 taken together with the nitrogen to which they are attached, may form a 3- to 8-membered substituted or unsubstituted nitrogen containing ring;

R_6 and R_7 are independently alkyl, heteroalkyl, aryl, aralkyl, heteroaryl or heteroaralkyl;

M_1 is hydrogen and M_2 is -OH; or

M_1 and M_2 taken together may form a carbonyl (C=O).

2. A compound according to Claim 1 in which R_1 and R_2 form a 5- or 6-membered heterocycloalkyl ring containing a heteroatom selected from O, N, or S.

3. A compound according to Claim 1 in which R_1 and R_2 are selected from H or alkyl.

4. A compound according to Claim 1 in which R_3 is substituted or unsubstituted aryl.

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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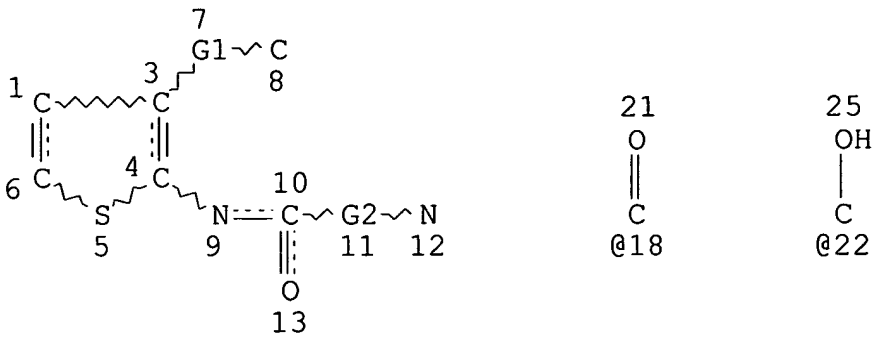

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DEFAULT ECLEVEL IS LIMITED

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STEREO ATTRIBUTES: NONE
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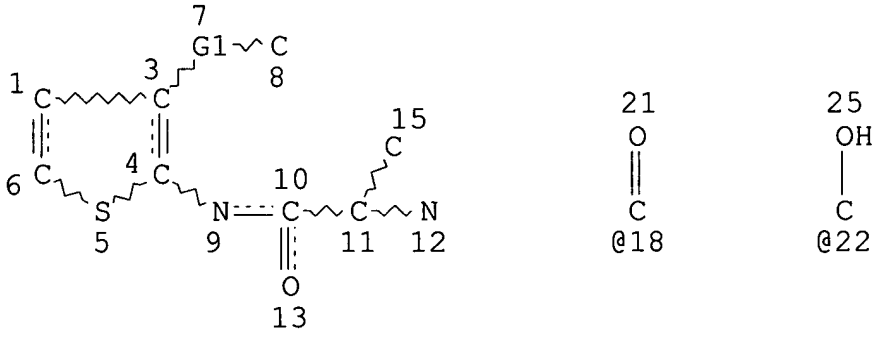

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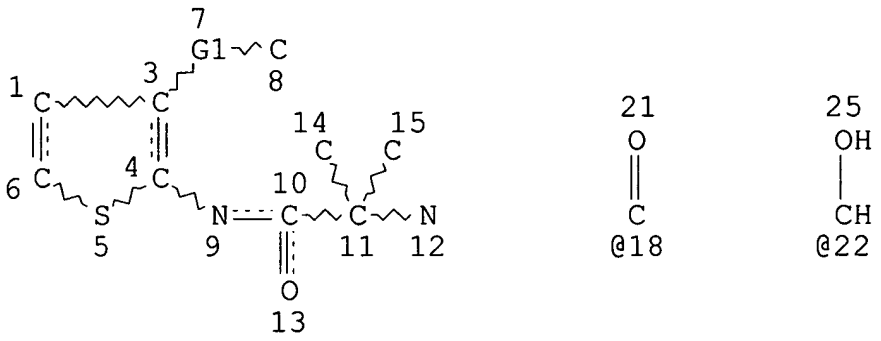

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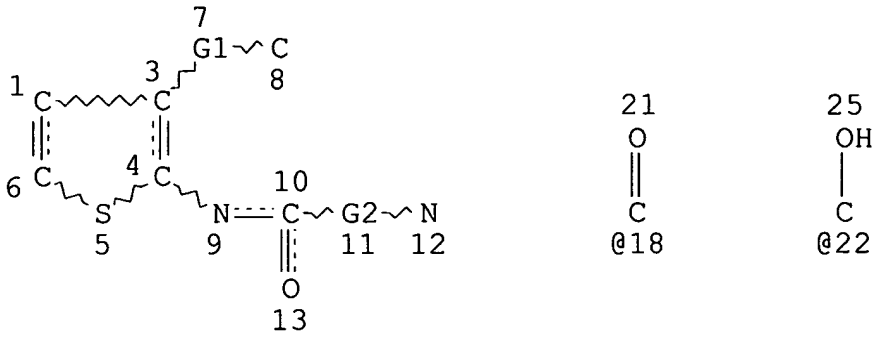

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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L18 ANSWER 1 OF 1 ZCAPLUS COPYRIGHT 2006 ACS on STN
AN 1993:213116 ZCAPLUS
DN 118:213116
ED Entered STN: 29 May 1993

TI Preparation of cyclopentathienotriazolodiazepines as PAF antagonists
IN Weber, Karl Heinz; Stransky, Werner; Kuefner-Muehl, Ulrike; Heuer, Hubert; Birke, Franz; Bechtel, Wolf Dietrich
PA Boehringer Ingelheim K.-G., Germany; Boehringer Ingelheim International G.m.b.H.
SO Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DT Patent
LA German
IC ICM C07D495-14
ICS A61K031-55
ICI C07D495-14, C07D333-00, C07D243-00, C07D233-00; C07D495-14, C07D333-00, C07D243-00, C07D249-00
CC 28-21 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 495473	A1	19920722	EP 1992-100563	19920115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
DE 4101146	A1	19920723	DE 1991-4101146	19910116
CA 2059353	AA	19920717	CA 1992-2059353	19920114
JP 05059063	A2	19930309	JP 1992-4764	19920114
US 5185442	A	19930209	US 1992-821514	19920115

PRAI DE 1991-4101146 A 19910116

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 495473	ICM	C07D495-14
	ICS	A61K031-55
	ICI	C07D495-14, C07D333-00, C07D243-00, C07D233-00; C07D495-14, C07D333-00, C07D243-00, C07D249-00
	IPCI	C07D0495-14 [ICM,5]; A61K0031-55 [ICS,5]; C07D0495-14 [ICI,5]; C07D0333-00 [ICI,5]; C07D0243-00 [ICI,5]; C07D0233-00 [ICI,5]; C07D0495-14 [ICI,5]; C07D0333-00 [ICI,5]; C07D0243-00 [ICI,5]; C07D0249-00 [ICI,5]

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JP 05059063	IPCI	C07D0495-14 [ICM,5]; A61K0031-55 [ICS,5]; C07D0495-14 [ICI,5]; C07D0243-00 [ICI,5]; C07D0333-00 [ICI,5]; C07D0495-14 [ICI,5]; C07D0249-00 [ICI,5]; C07D0243-00 [ICI,5]; C07D0333-00 [ICI,5]
US 5185442	IPCI	C07D0513-14 [ICM,5]; A61K0031-55 [ICS,5]
	IPCR	C07D0495-00 [I,C]; C07D0495-04 [I,A]; C07D0495-14 [I,A]
	NCL	540/555.000

OS MARPAT 118:213116

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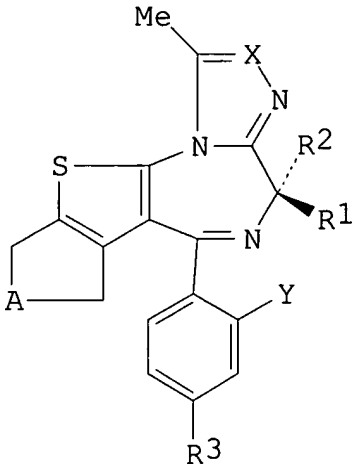

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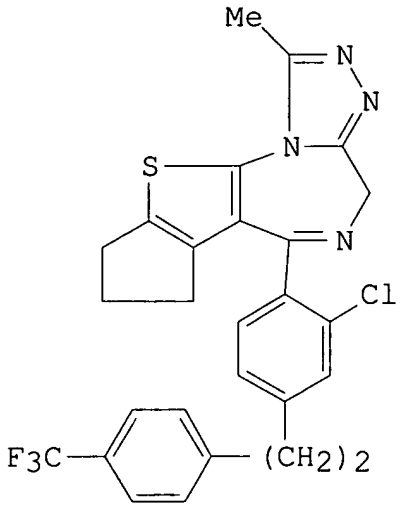


II

AB Title compds. I [A = CH2, (CH2)2, X = N, CH, CMe; Y = H, halo, R1, R2 = H, Me; R3 = (CH2)nR, CH:CHR, (CH2)mSR, (CH2)mOR, R = (substituted) Ph; n = 1-4; m = 1-3; R1 .noteq. R2 = H when Y = H] were prepd. as platelet activating factor (PAF) antagonists (no data). Thus, [2-chloro-4-(trifluoromethylphenylethyl)phenyl]carbony acetonitrile (prepn. from Me 4-hydroxymethylbenzoate given) was converted in 7 steps to title compd. II. Formulations contg. I were prepd.

ST cyclopentathienotriazolodiazepine prepn PAF antagonist; diazepine

cyclopentathienotriazolo prepn PAF antagonist

IT 65154-06-5, Blood platelet-activating factor
(antagonist, cyclopentathienotriazolodiazepines as)

IT 1253-46-9P 2417-72-3P 5372-81-6P, Dimethyl 2-aminoterephthalate
133728-31-1P 134751-98-7P 134751-99-8P 143468-76-2P
143468-77-3P 143468-78-4P 143468-79-5P 143468-80-8P
143468-81-9P 143468-82-0P 143468-83-1P **143468-84-2P**
143468-85-3P 143468-86-4P 143468-87-5P 143468-88-6P
143468-89-7P 143572-59-2P 143572-60-5P
(prepn. of, as intermediate for cyclopentathienotriazolodiazepine platelet activating factor antagonist)

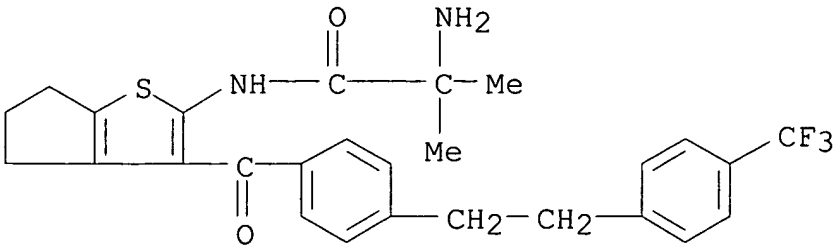
IT 143468-73-9P 143468-74-0P 143468-75-1P 143492-45-9P
143492-46-0P
(prepn. of, as platelet activating factor antagonist)

IT 75-05-8, Acetonitrile, reactions 78-39-7, Triethyl orthoacetate
120-92-3, Cyclopentanone 455-19-6, 4-Trifluoromethylbenzaldehyde
563-76-8 603-35-0, Triphenylphosphine, reactions 5292-45-5,
Dimethyl 2-nitroterephthalate 6908-41-4, Methyl
4-hydroxymethylbenzoate 7704-34-9, Sulfur, reactions 20769-85-1
(reaction of, in prepn. of cyclopentathienotriazolodiazepine platelet activating factor antagonist)

IT **143468-84-2P**
(prepn. of, as intermediate for cyclopentathienotriazolodiazepine platelet activating factor antagonist)

RN 143468-84-2 ZCAPLUS

CN Propanamide, 2-amino-N-[5,6-dihydro-3-[4-[2-[4-(trifluoromethyl)phenyl]ethyl]benzoyl]-4H-cyclopenta[b]thien-2-yl]-2-methyl- (9CI) (CA INDEX NAME)



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L20 ANSWER 1 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

2005:409526 Document No. 142:463710 Preparation of thieno[2,3-b]pyridinone derivatives as kinase, especially p38 MAP kinase, inhibitors useful in the treatment of and/or prevention of immune or inflammatory disorders. Alexander, Rikki Peter; Davis,

Jeremy Martin; Hutchings, Martin Clive; Laing, Victoria Elizabeth; Trevitt, Graham Peter (Celltech R & D Limited, UK). PCT Int. Appl. WO 2005042540 A1 20050512, 181 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2004-GB4490 20041022. PRIORITY: GB 2003-24902 20031024; GB 2003-29490 20031219; GB 2004-2918 20040210; GB 2004-16934 20040729.

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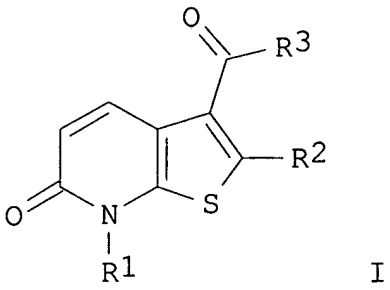

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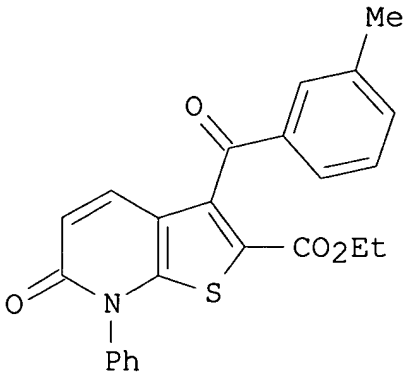


II

AB Title compds. I [wherein R1 = (un)substituted (C3-7 cycloalkyl)methyl, hetero/aryl; R2 = H, NO2, CN, CO2H and derivs.,

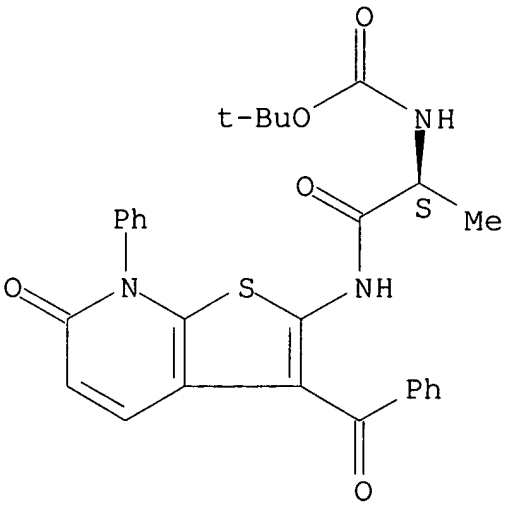
NH2 and derivs., etc.; R3 = (un)substituted hetero/aryl; and their pharmaceutically acceptable salts] were prepd. as p38 MAP kinase inhibitors for treating and/or preventing immune or inflammatory disorders. For example, II was prepd. by reacting Et 3-bromo-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-b]pyridine-2-carboxylate (prepn. given) with 3-methylbenzaldehyde and oxidn. with MnO2. I are potent inhibitors of p38 MAP kinase (IC50 around 2 .mu.M and below), esp. p38.alpha. kinase.

IT **851748-90-8P**, tert-Butyl [(1S)-2-[(3-benzoyl-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-b]pyridin-2-yl)amino]-1-methyl-2-oxoethyl]carbamate
(intermediate; prepn. of thienopyridinones as p38 MAP kinase inhibitors useful in the treatment of and/or prevention of immune or inflammatory disorders)

RN 851748-90-8 ZCAPLUS

CN Carbamic acid, [(1S)-2-[(3-benzoyl-6,7-dihydro-6-oxo-7-phenylthieno[2,3-b]pyridin-2-yl)amino]-1-methyl-2-oxoethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

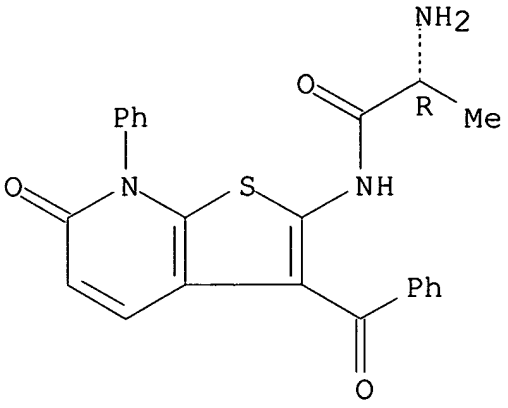


IT **851753-21-4P**
(p38.alpha. kinase inhibitor; prepn. of thienopyridinones as p38 MAP kinase inhibitors useful in the treatment of and/or prevention of immune or inflammatory disorders)

RN 851753-21-4 ZCAPLUS

CN Propanamide, 2-amino-N-(3-benzoyl-6,7-dihydro-6-oxo-7-phenylthieno[2,3-b]pyridin-2-yl)-, monohydrochloride, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

IT **851748-90-8P**, tert-Butyl [(1S)-2-[(3-benzoyl-6-oxo-7-phenyl-6,7-dihydrothieno[2,3-b]pyridin-2-yl)amino]-1-methyl-2-oxoethyl]carbamate
(intermediate; prepn. of thienopyridinones as p38 MAP kinase inhibitors useful in the treatment of and/or prevention of immune or inflammatory disorders)

IT **851753-21-4P**
(p38.alpha. kinase inhibitor; prepn. of thienopyridinones as p38 MAP kinase inhibitors useful in the treatment of and/or prevention of immune or inflammatory disorders)

L20 ANSWER 2 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
2002:465859 Document No. 137:47190 Preparation of (fused) thiazolyl and thienyl-substituted N-(aminomethylbenzoyl)(hetero)arylglycinamides as tryptase inhibitors.. Lively, Sarah Elizabeth; Harrison, Martin James; Naylor, Neil Jason; Farthing, Christopher Neil; Waszkowycz, Bohdan (Tularik Limited, UK). PCT Int. Appl. WO 2002047762 A1 20020620, 138 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2001-GB5526 20011212. PRIORITY: WO 2000-GB4764 20001213; GB 2001-14185 20010612.

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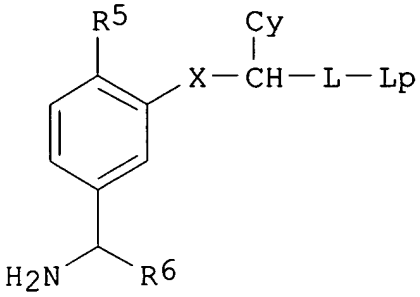

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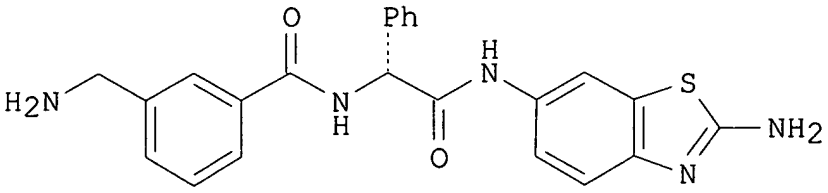


II

AB N-(3-aminomethylbenzoyl)aryl- and heteroarylglycinamides I [Cy = (un)substituted cycloalkyl, aryl, heterocyclyl, heteroaryl; L = CONR1(CH2)m; Lp = (un)substituted thiazolyl, thiazol-2-yl, 4-arylthiazol-2-yl, benzothiazol-2-yl, 4,5,6,7-tetrahydrobenzothiazol-2-yl, etc.; m = 0, 1; R1 = H, alkyl, phenylalkyl; R5 = H, H2N, HO, H2NCH2, HOCH2; R6a = H, Me; X = CH:CH, CONR1, NHCO, NR1CH2, CH2O, CO2, CH2CH2] are prepd. as inhibitors of the serine protease tryptase for the treatment of asthma (no data). E.g., 2,6-diaminobenzothiazole (prepd. by redn. of 2-amino-6-nitrobenzothiazole) was coupled with N-Boc-D-phenylglycine, deprotected with F3CCO2H, the free .alpha.-amino group coupled with 3-(N-tert-butoxycarbonylaminomethyl)benzoic acid, and the product deprotected with F3CCO2H to give phenylglycinamide II. Formulations contg. I are given.

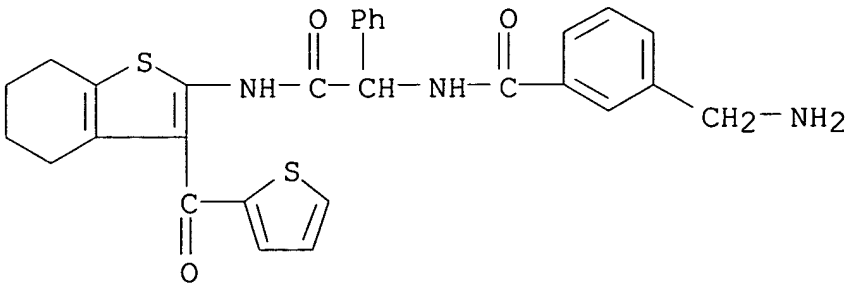
IT **438250-91-0P**
(example compd.; prepn. of (fused) thiazolyl and thienyl-substituted N-(aminomethylbenzoyl)(hetero)arylglycinamides as tryptase inhibitors)

RN 438250-91-0 ZCAPLUS

CN Benzeneacetamide, .alpha.-[[3-(aminomethyl)benzoyl]amino]-N-[4,5,6,7-tetrahydro-3-(2-thienylcarbonyl)benzo[b]thien-2-yl]-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

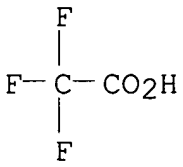
CM 1

CRN 438250-90-9
CMF C29 H27 N3 O3 S2



CM 2

CRN 76-05-1
CMF C2 H F3 O2



IT **438250-91-0P**
(example compd.; prepn. of (fused) thiazolyl and thienyl-substituted N-(aminomethylbenzoyl)(hetero)arylglycinamides as tryptase inhibitors)

L20 ANSWER 3 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
2002:407961 Document No. 137:337800 Synthesis and bioactivities of novel 4,5,6,7-Tetrahydrothieno[2,3-c]pyridines as inhibitors of tumor necrosis factor-.alpha. (TNF-.alpha.) production. Fujita, Masakazu; Seki, Taketsugu; Inada, Haruaki; Ikeda, Naoko (Omiya Research Laboratory, Nikken Chemicals Co., Ltd., Saitama-shi, Saitama, 330-0835, Japan). Bioorganic & Medicinal Chemistry Letters, 12(12), 1607-1611 (English) 2002. CODEN: BMCLE8. ISSN: 0960-894X. OTHER SOURCES: CASREACT 137:337800. Publisher: Elsevier Science Ltd..
AB Novel 4,5,6,7-tetrahydrothieno[2,3-c]pyridine derivs. were synthesized and evaluated for their abilities to inhibit lipopolysaccharide (LPS)-stimulated prodn. of TNF-.alpha. in rat

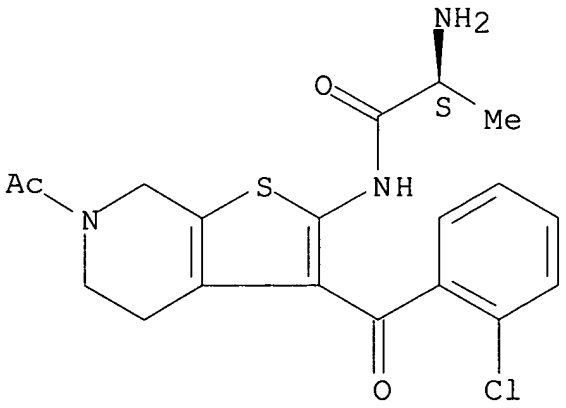
whole blood. Several of these compds. exhibited potent inhibitory activity.

IT **474268-44-5P**
(synthesis of tetrahydrothieno[2,3-c]pyridines as inhibitors of tumor necrosis factor-.alpha. prodn.)

RN 474268-44-5 ZCAPLUS

CN Propanamide, N-[6-acetyl-3-(2-chlorobenzoyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridin-2-yl]-2-amino-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

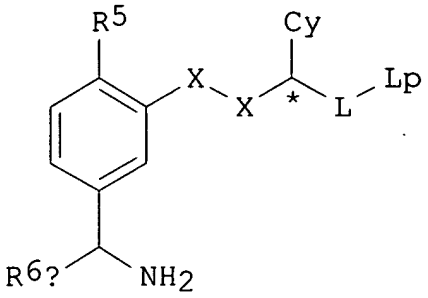


IT **474268-44-5P**
(synthesis of tetrahydrothieno[2,3-c]pyridines as inhibitors of tumor necrosis factor-.alpha. prodn.)

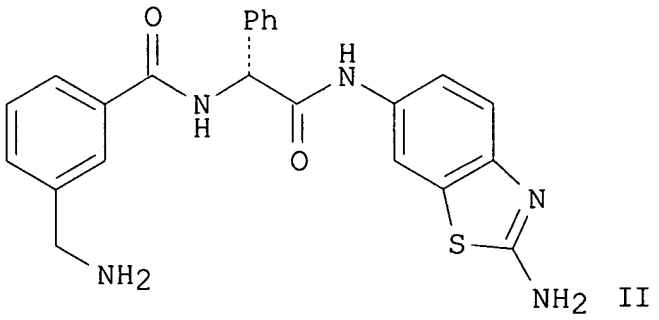
L20 ANSWER 4 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

2001:453049 Document No. 135:45999 Synthesis and use of serine protease inhibitors (substituted phenylglycine derivatives) as antiinflammatory agents. Lively, Sarah Elizabeth; Waszkowycz, Bohdan; Harrison, Martin James; Farthing, Christopher Neil; Johnson, Keith Michael (Protherics Molecular Design Limited, UK). PCT Int. Appl. WO 2001044226 A1 20010621, 171 pp. DESIGNATED STATES: W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM; RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG, TR. (English). CODEN: PIXXD2. APPLICATION: WO 2000-GB4764 20001213. PRIORITY: GB 1999-29552 19991214; WO 2000-GB2291 20000613.

GI



I



II

AB A tryptase inhibitor of formula I is claimed [wherein; R5 = amino, OH, aminomethyl, hydroxymethyl or H; R6a = H or Me; X-X = CH:CH, CONR1a, NHCO, NR1aCH2, CH2NR1a, CH2O, OCH2, CO2, OCO and CH2CH2, where R1a = H or (phenyl)alkyl; L = CO or CONR1d(CH2)m, where m = 0-1 and R1d = H or (phenyl)alkyl; Cy = (un)substituted (un)satd. mono or polycyclic homo or heterocyclic group; Lp = (un)substituted alk(en)yl, carbocyclic, heterocyclic or a combination of 2 or more groups linked by a spiro linkage or a single or double bond or by CO, O, OCO, COO, S(O)0-2, etc.]. Over 100 synthetic examples are described. For example, 2,6-diaminobenzothiazole was coupled with N-tert-butoxycarbonyl-D-phenylglycine (EDC/HOAt/DMF) to make the 6-amide deriv., trifluoroacetate salt. The amide intermediate was deprotected (TFA), coupled to 3-((tert-butoxycarbonyl)aminomethyl)benzoic acid (EDC/HOAt/DMF) and deprotected (TFA) to give phenylglycine deriv. II, isolated as the bis-trifluoroacetate salt. Compds. of the invention are tryptase inhibitors and are useful as antiinflammatory agents (no data).

IT **344931-85-7P**

(synthesis and use of (hetero)arom. substituted phenylglycine derivs. as antiinflammatory agents)

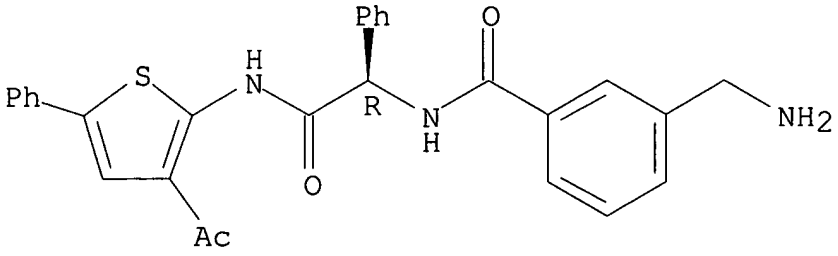
RN 344931-85-7 ZCAPLUS

CN Benzeneacetamide, N-(3-acetyl-5-phenyl-2-thienyl)-.alpha.-[[3-(aminomethyl)benzoyl]amino]-, (.alpha.R)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

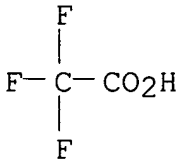
CRN 344931-84-6
CMF C28 H25 N3 O3 S

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2

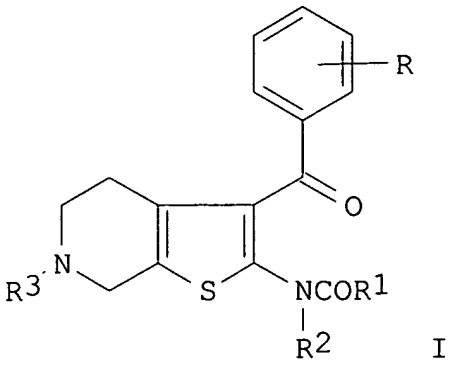


IT **344931-85-7P**
(synthesis and use of (hetero)arom. substituted phenylglycine derivs. as antiinflammatory agents)

L20 ANSWER 5 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

2001:403450 Document No. 135:14319 4,5,6,7-Tetrahydrothieno[2,3-c]pyridines, pharmaceutical compositions, and TNF-.alpha. formation inhibitors containing them. Inada, Haruaki; Fujita, Shoichi; Kawahara, Yoshikazu; Seki, Takeji (Nikken Chemicals Co., Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 2001151779 A2 20010605, 20 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1999-338982 19991130.

GI



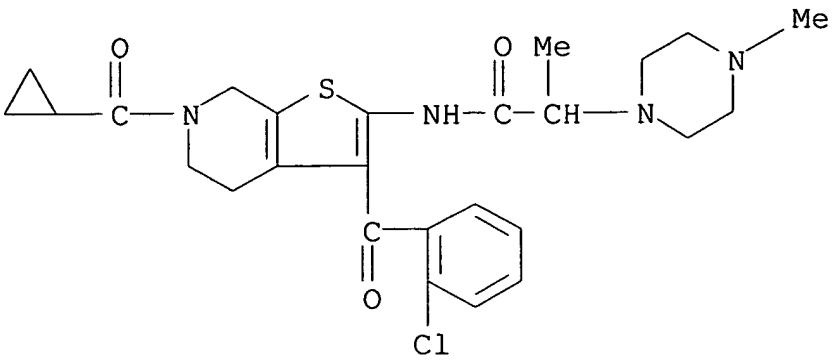
I

AB The inhibitors, useful for treatment of inflammation, rheumatoid arthritis, and allergy, comprise title compds. I [R = H, Me, halo; R1 = lower alkyl, cycloalkyl, alkylamino, aryl, heterocyclyl, etc.; R2 = H, C1-3 alkyl; R3 = (aryl)alkyl, lower alkanoyl, cycloalkylcarbonyl, di(lower alkyl)amino], their hydrates, or salts. 1-Acetyl-4-piperidone was cyclized with S and 2-chlorocyanoacetophenone and N-acetylated to give I (R = 2-Cl, R1 = Me, R2 = H, R3 = Ac), which in vitro inhibited TNF-.alpha. formation with IC50 of 9.50 .mu.M.

IT **342884-33-7P**
(prepn. of tetrahydrothieno[2,3-c]pyridines as TNF-.alpha. formation inhibitors)

RN 342884-33-7 ZCAPLUS

CN 1-Piperazineacetamide, N-[3-(2-chlorobenzoyl)-6-(cyclopropylcarbonyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridin-2-yl]-.alpha.,4-dimethyl- (9CI) (CA INDEX NAME)



IT **342884-33-7P**
(prepn. of tetrahydrothieno[2,3-c]pyridines as TNF-.alpha. formation inhibitors)

L20 ANSWER 6 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1996:608899 Document No. 125:292265 Structural optimization of 4-(2-chlorophenyl)-9-methyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepines as antagonists for platelet activating factor: pharmacological contribution of substituents at the 2- and 6-positions of a condensed ring system. Kawakami, Y.; Kitani, H.; Yuasa, S.; Abe, M.; Moriwaki, M.; Kagoshima, M.; Terasawa, M.; Tahara, T. (Research Laboratories, Yoshitomi Pharmaceutical Industries Ltd., Yoshitomi, 871, Japan). European Journal of Medicinal Chemistry, 31(9), 683-692 (English) 1996. CODEN: EJMCA5. ISSN: 0223-5234. OTHER SOURCES: CASREACT 125:292265. Publisher: Elsevier.

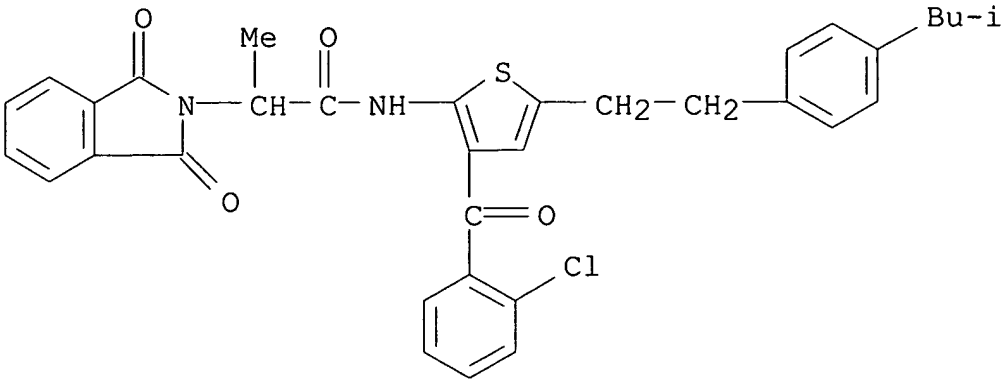
AB A series of 4-(2-chlorophenyl)-9-methyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine derivs. bearing substituents at the 2- and 6-positions were synthesized, and evaluated in vitro for their inhibitory activity on rabbit platelet aggregation induced by platelet activating factor (PAF) and in vivo for their preventing effect on PAF-induced mortality in mice. The length of alkyl or arylalkyl side chain at the 2-position was responsible for enhancing the affinity for the PAF receptor. The simultaneous substitution at both the 2- and 6-positions resulted in a successful sepn. of the affinity for the PAF receptor from that for the benzodiazepine (BZ) receptor. Thus, (.+-.)-4-(2-chlorophenyl)-2-[2-(4-isobutylphenyl)ethyl]-6,9-dimethyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine (Y-24180) was confirmed to be a specific antagonist for the PAF receptor and is currently under clin. trials.

IT **127113-12-6P 127113-13-7P 183130-23-6P 183130-24-7P**
(thienotriazolo-diazepines prepn. and structure-related activity

as antagonists for platelet activating factor)

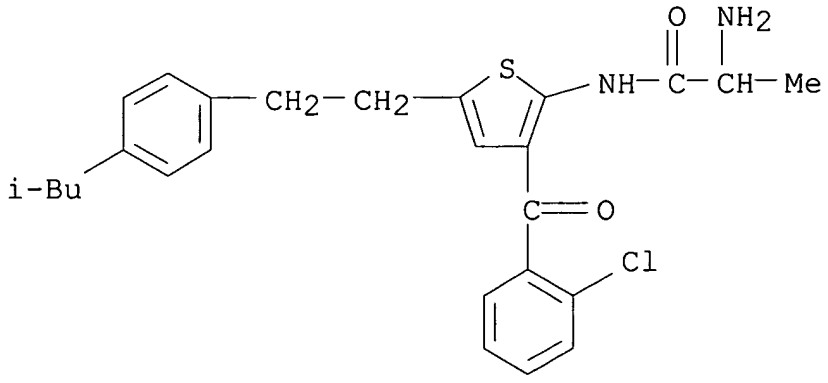
RN 127113-12-6 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)



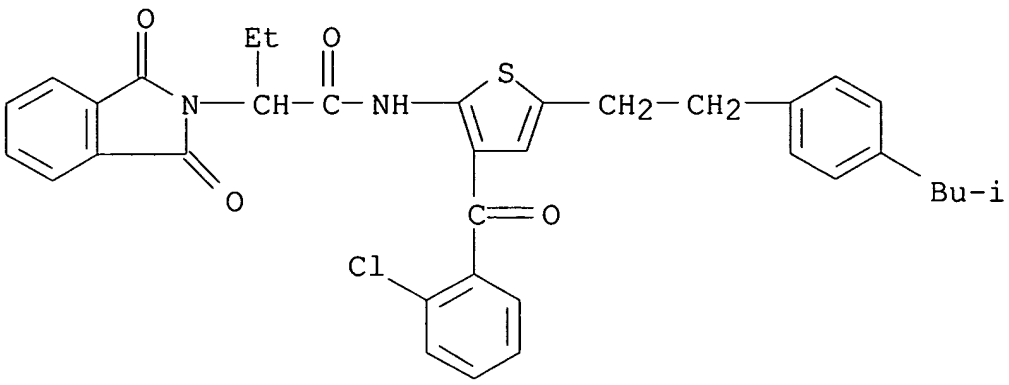
RN 127113-13-7 ZCAPLUS

CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]- (9CI) (CA INDEX NAME)

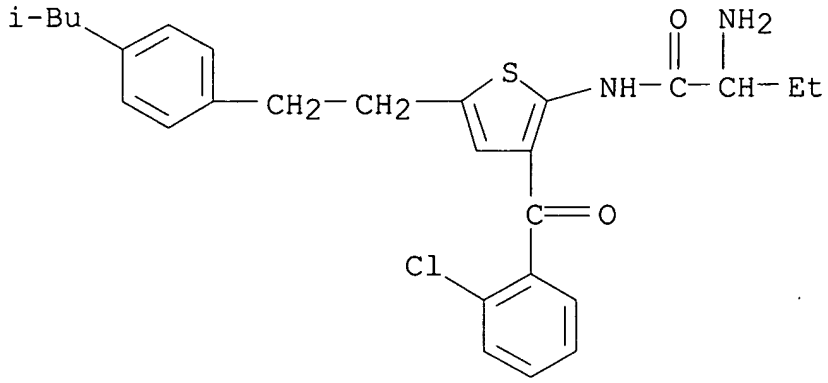


RN 183130-23-6 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]-.alpha.-ethyl-1,3-dihydro-1,3-dioxo- (9CI) (CA INDEX NAME)



RN 183130-24-7 ZCAPLUS
CN Butanamide, 2-amino-N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]- (9CI) (CA INDEX NAME)



IT **127113-12-6P 127113-13-7P 183130-23-6P 183130-24-7P**
(thienotriazolo-diazepines prepn. and structure-related activity as antagonists for platelet activating factor)

L20 ANSWER 7 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1995:844831 Document No. 124:55918 Synthesis of some novel tetracyclic diazepines of biological interest. Kamel, Mona M.; Mohamed, Mosaad S.; Shaban, Mohamed A.; El-Zanfally, Saad H. (Faculty Pharmacy, Cairo University, Cairo, Egypt). Alexandria Journal of Pharmaceutical Sciences, 9(2), 79-83 (English) 1995. CODEN: AJPSES. ISSN: 1110-1792. Publisher: University of Alexandria, Faculty of Pharmacy.
AB The synthesis of certain 7,8,9,10-tetrahydro-4H-s-triazolo[3,4-c][1]benzothieno[2,3-e][1,4]diazepine derivs. e.g. 1,6-diphenyl-4-methyl-7,8,9,10-tetrahydro-4H-s-triazolo[3,4-

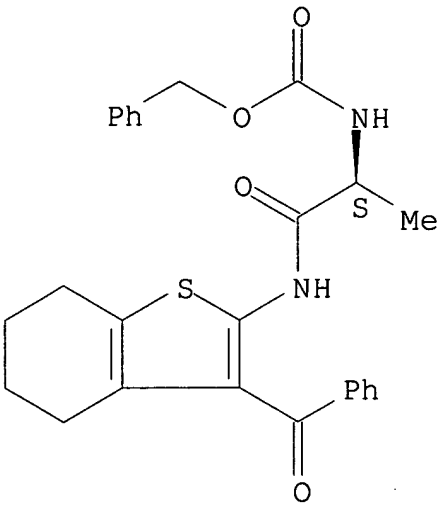
c][1]benzothieno[2,3-e][1,4]diazepine and 1-(3-pyridyl) analog was described.

IT **172292-61-4P 172292-62-5P**
(synthesis of tetracyclic diazepines)

RN 172292-61-4 ZCAPLUS

CN Carbamic acid, [2-[(3-benzoyl-4,5,6,7-tetrahydrobenzo[b]thien-2-yl)amino]-1-methyl-2-oxoethyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

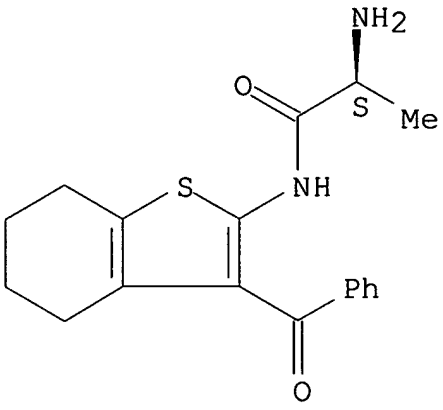
Absolute stereochemistry.



RN 172292-62-5 ZCAPLUS

CN Propanamide, 2-amino-N-(3-benzoyl-4,5,6,7-tetrahydrobenzo[b]thien-2-yl)-, monohydrobromide, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HBr

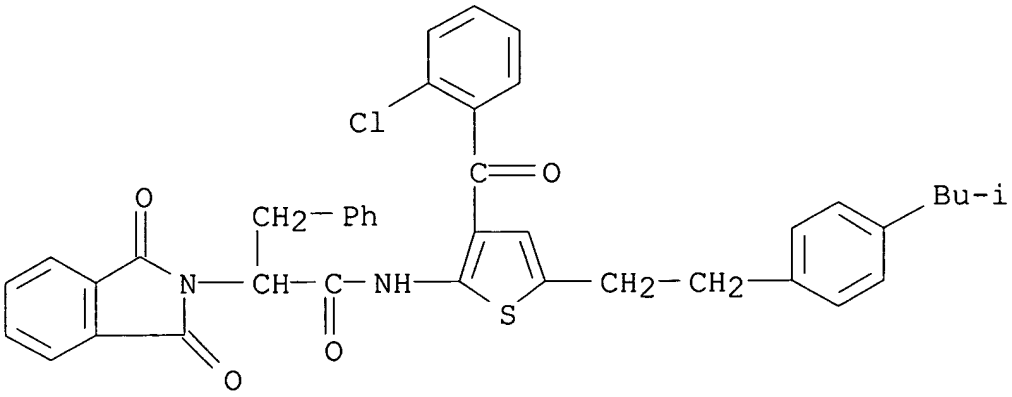
IT **172292-61-4P 172292-62-5P**
(synthesis of tetracyclic diazepines)

L20 ANSWER 8 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1994:270466 Document No. 120:270466 Prepn. of diazepines for treatment of osteoporosis. Tahara, Tetsuya; Moriwaki, Minoru; Chiba, Kenji; Manabe, Shunichi; Shindo, Masanori; Nakagawa, Takashi; Nakamura, Takeshi (Yoshitomi Pharmaceutical Industries, Ltd., Japan; Japan Tobacco, Inc.). PCT Int. Appl. WO 9307129 A1 19930415, 202 pp. DESIGNATED STATES: W: CA, HU, JP, KR, US; RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1992-JP1325 19921012. PRIORITY: JP 1991-327954 19911011.
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; Ar = aryl, heteroaryl; X = O, S; Y = H, alkyl, alkenyl, alkynyl, carboxyalkyl, alkoxycarbonylalkyl, etc.; or XY = :N-N:CR6, etc.; R6 = H, halo, alkyl, alkenyl, etc.; W = imino; R = H, alkyl, haloalkyl, aryl, heteroaryl, aralkyl; R1 = H, CO2H, alkoxycarbonyl, etc.; Q ring = (un)substituted benzene residue, (un)substituted thiophene residue, etc.] are prepd. Refluxing a mixt. of the aminothiophene deriv. II (R2 = H) with DL-N-phthaloylphenylalanyl chloride in CHCl3 gave II (R2 = N-phthaloylphenylalanyl), which was treated with H2NNH2.H2O in MeOH at room temp. for 4 h and then with concd. HCl at 60.degree. for 3 h to give , after treatment with 5% NaHCO3, the thienodiazepine III, which was cyclocondensed with H2NNH2.H2O and MeC(OEt)2 to give the title compd. IV. In a study using bones of mice treated with 45Ca, this at 20 .mu.M decreased Ca resorption by 30.7%.
IT **153194-89-9P 153194-91-3P**

(prepn. of, as intermediate for drugs for treatment of osteoporosis)

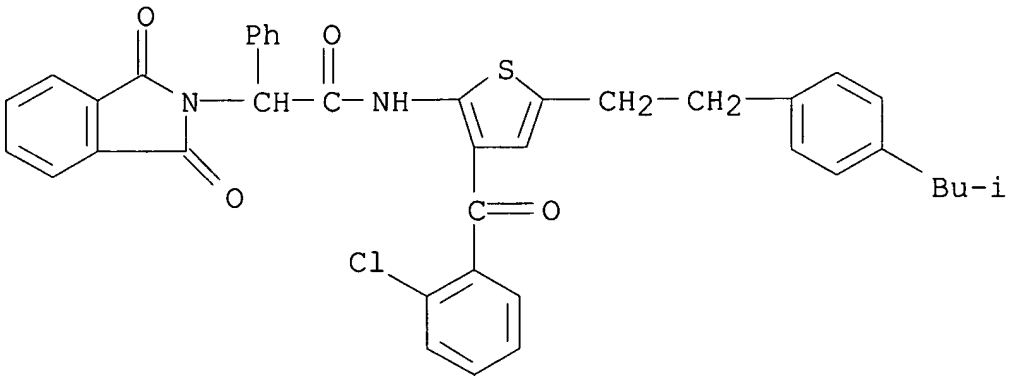
RN 153194-89-9 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]-1,3-dihydro-1,3-dioxo-.alpha.-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 153194-91-3 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]-1,3-dihydro-1,3-dioxo-.alpha.-phenyl- (9CI) (CA INDEX NAME)



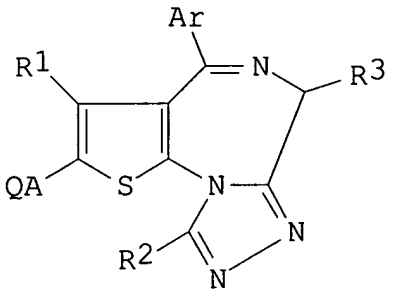
IT **153194-89-9P 153194-91-3P**
(prepn. of, as intermediate for drugs for treatment of osteoporosis)

L20 ANSWER 9 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

1993:191772 Document No. 118:191772 Preparation of thienotriazolodiazepine derivatives as platelet activating factor

(PAF) and histamine antagonists. Moriwaki, Minoru; Kawakami, Yukio; Yuasa, Shuji; Terasawa, Michio (Yoshitomi Pharmaceutical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 04226993 A2 19920817 Heisei, 17 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1991-146855 19910522. PRIORITY: JP 1990-134905 19900523.

GI



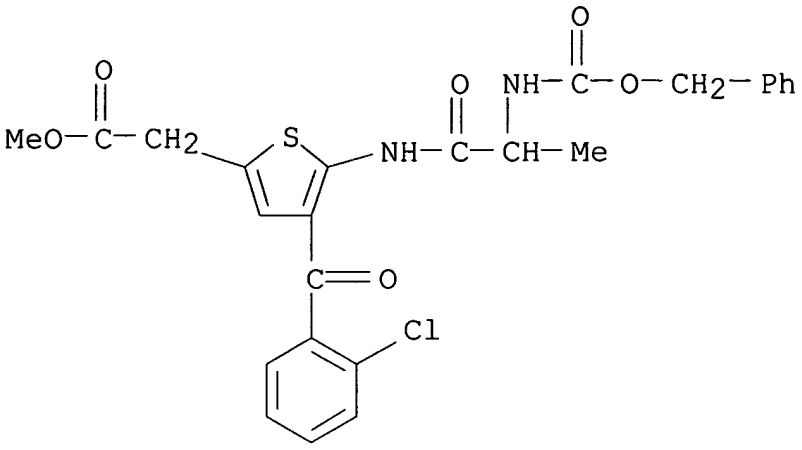
I

AB The title compds. (I; Ar = halophenyl; R1 = H, lower alkyl; R2 = H, lower alkyl, cycloalkyl; R3 = H, CF3, lower alkyl; A = alkylene; Q = 4-diphenylmethyl-1-piperazinyl, 4-diphenylmethylenepiperidino) are prepd. I show strong PAF- and histamine-antagonists activity with little central nervous system-suppressing activities such as tranquilizing and muscle relaxant activity (no data). Thus, 5.3 g Me 3-[5-(2-chlorophenyl)-2,3-dihydro-3-methyl-2-thioxo-1H-thieno[2,3-e]-1,4-diazepin-2-yl]propionate (prepn. given) and 600 mg N2H4 were heated at 40-45.degree., concd. in vacuo, dissolved in PhMe, thereto 2.6 g Et orthoacetate was added, and the mixt. was heated at 70.degree. for 1 h to give 20.2 g Me 3-[4-(2-chlorophenyl)-6,9-dimethyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepin-2-yl]propionate which (31.7 g) was reduced with LiAlH4 in THF to give 20.2 g 3-[4-(2-chlorophenyl)-2-(3-hydroxypropyl)-6,9-dimethyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine. This (3.9 g) was reacted with MeSO2Cl in the presence of Et3N CH2Cl2, concd., dissolved in dioxane, and refluxed with 7.5 g N-diphenylmethylpiperazine for 4 h to give I [QA = 3-(4-diphenylmethyl-1-piperazinyl)propyl, Ar = 2-ClC6H4, R1 = H; R2 = R3 = Me]. A total of 13 I were prepd.

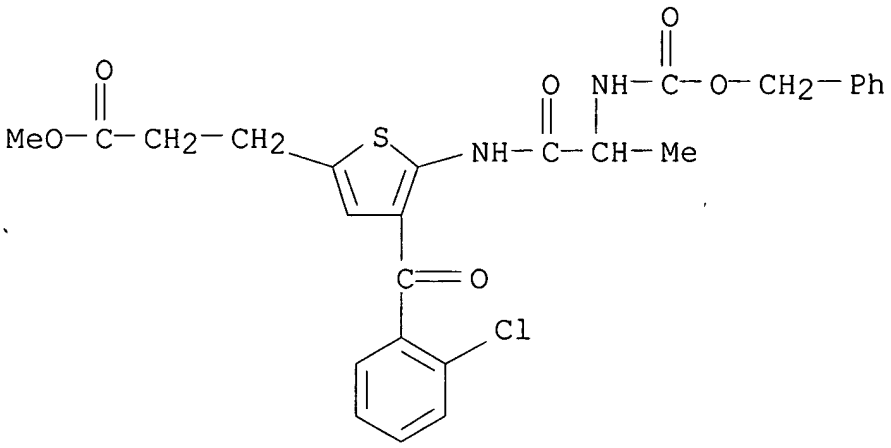
IT **125115-83-5P 125142-11-2P**
(prepn. of, as intermediate for platelet activating factor and histamine antagonist thienotriazolodiazepine)

RN 125115-83-5 ZCAPLUS

CN 2-Thiopheneacetic acid, 4-(2-chlorobenzoyl)-5-[[1-oxo-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 125142-11-2 ZCAPLUS
CN 2-Thiophenepropanoic acid, 4-(2-chlorobenzoyl)-5-[[1-oxo-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



IT **125115-83-5P 125142-11-2P**
(prepn. of, as intermediate for platelet activating factor and histamine antagonist thienotriazolodiazepine)

L20 ANSWER 10 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1993:22262 Document No. 118:22262 Preparation of thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepines and related compounds as platelet activating factor antagonists. Weber, Karl Heinz; Stransky, Werner; Kuefner-Muehl, Ulrike; Heuer, Hubert; Birke, Franz (Boehringer Ingelheim KG, Germany). Ger. Offen. DE 4107521 A1 19920910, 29 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1991-4107521 19910308.

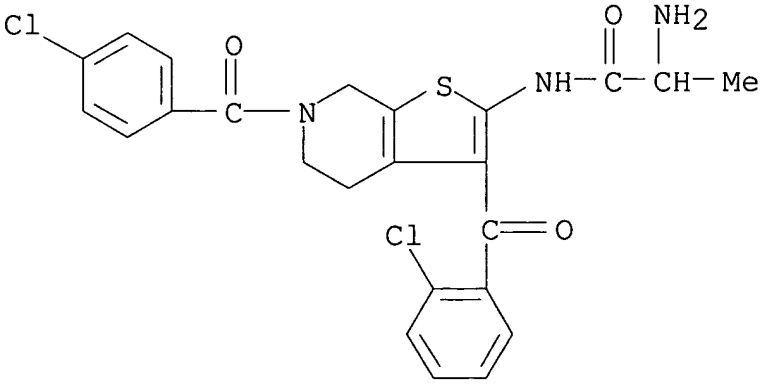
GI For diagram(s), see printed CA Issue.

AB Title compds. [I; R1 = H, halo, (HO- or halo-substituted) alkyl, cyclopropyl, cyclobutyl; R2, R3 = H, Me, CF3, HOCH2; R4 = (substituted) Ph, pyridyl, thienyl; X = N, CH; A = Q1, Q2, Q3; B = CH2, CH2CH2; R5 = (substituted) alkyl, (substituted) aryl, or arylmethyl, arylethyl; R6 = H, (substituted) alkyl, PhCH2; Z = alkylene; Z1 = alkylene, bond; m, n = 1-3; m + n = 2-4], were prepd. Thus, 4-piperidine.HCL was acylated with 4-ClC6H4COCl in refluxing THF contg. K2CO3; the product was cyclocondensed with o-chlorocyanoacetophenone and S in DMF/Et3N to give 2-amino-3-(2-chlorobenzoyl)-6-(4-chlorobenzoyl)tetrahydropyrido[2,3-c]thiophene. This was acylated with MeCHBrCOCl followed by amination with NH3 and cyclization in refluxing PhMe contg. SiO2 with removal of H2O to give 3-(4-chlorobenzoyl)-6-(2-chlorophenyl)-8-methyl-2,3,4,5-tetrahydro-4H-pyrido[4,2:4',5']thieno[3,2-f][1,4]diazepin-9-one. This was sulfated with P2S5 in glyme contg. NaHCO3 and the resulting thione was stirred with N2H4 in THF followed by reflux with (EtO)3CMe in EtOH to give title compd. II. (-)-II inhibited 3H-platelet activating factor binding to human blood platelets with Ki = 1.9 nM. Dosage forms were prepd. contg. the 3-(3-chlorobenzoyl) analog of II.

IT **144947-50-2P**
(prepn. of, as intermediate for pyridylthienotriazolodiazepine platelet activating factor antagonist)

RN 144947-50-2 ZCAPLUS

CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-6-(4-chlorobenzoyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridin-2-yl]- (9CI) (CA INDEX NAME)

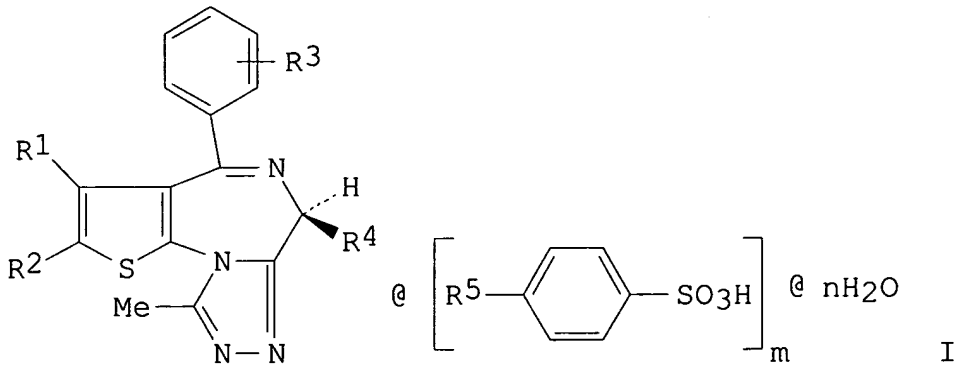


IT **144947-50-2P**
(prepn. of, as intermediate for pyridylthienotriazolodiazepine platelet activating factor antagonist)

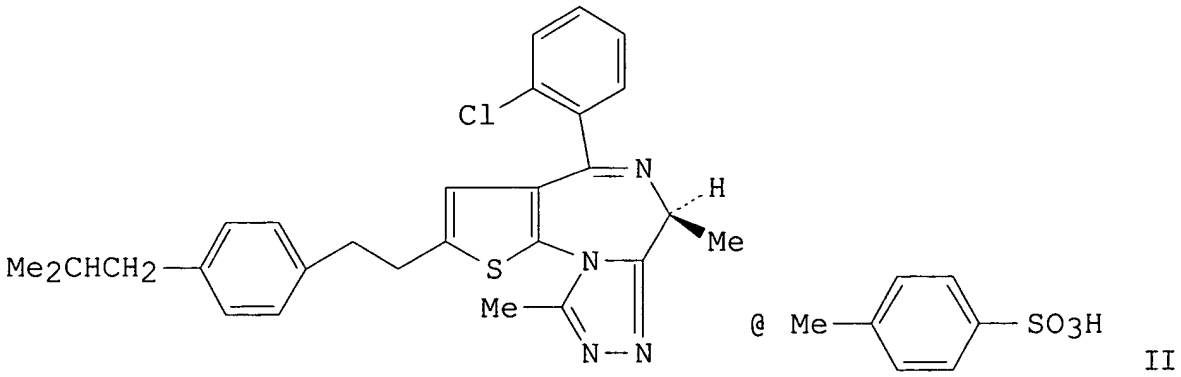
L20 ANSWER 11 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1992:490334 Document No. 117:90334 Preparation and formulation of

optically active thienotriazolodiazepine compounds. Moriwaki, Minoru; Yuasa, Syuji; Kitani, Hiroyuki; Terasawa, Michio (Yoshitomi Pharmaceutical Industries, Ltd., Japan). Eur. Pat. Appl. EP 480455 A1 19920415, 18 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1991-117375 19911011. PRIORITY: JP 1990-274451 19901012; JP 1991-214512 19910731.

GI



I



II

AB Title compds. (I; R1 = H; R2 = alkyl-substituted 2-phenylethyl, 2-morpholinocarbonylethyl, alkyl; R1R2 = morpholinomethyl-, morpholinocarbonyl-, or N,N-dipropylcarbamoyl-substituted satd. 5-membered ring; R3 = halo, alkyl, alkoxy; R4 = CF3, alkyl; R5 = H, Me; m = 1, 2; n = 0-2), were prepd. as stable crystals. Thus, 2-amino-3-(2-chlorobenzoyl)-5-[2-(4-isobutylphenyl)ethyl]thiophene was refluxed with N-phthalyl-L-alanyl chloride in CHCl3 to give the protected alanylaminothiophene, which was stirred with N2H4 in EtOH at <0.degree. to give crystals which were heated with conc. HCl in MeOH at 60.degree. to give an oil which was refluxed with HOAc to

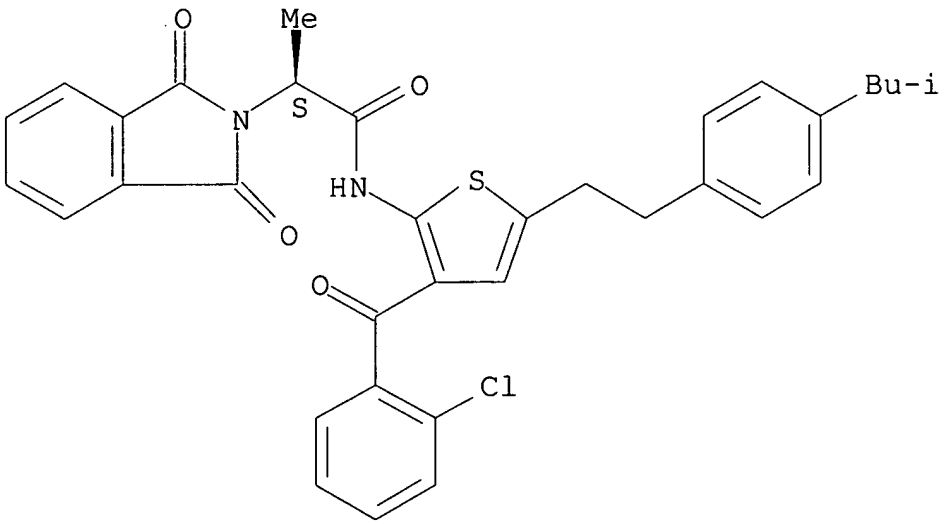
give 3S-(-)-5-(2-chlorophenyl)-7-[2-(4-isobutylphenyl)ethyl]-1,3-dihydro-3-methyl-2H-thieno[2,3-e][1,4]diazepine-2-one. The latter was refluxed with P2S5 in CHCl3 to give the thione, which was stirred with N2H4 in THF at room temp. followed by heating with (EtO)3CMe and salification with 4-MeC6H4SO3H.H2O in EtOH to give title compd. II. II had .apprx.3 times stronger the activity of its racemate as a PAF antagonist. Tablet and powder formulations were prepd. contg. II.

IT **142415-77-8P 142415-80-3P 142415-81-4P 142430-62-4P**
(prepn. of, as intermediate for thienotriazolodiazepine platelet activating factor antagonist)

RN 142415-77-8 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]-1,3-dihydro-.alpha.-methyl-1,3-dioxo-, (S)- (9CI) (CA INDEX NAME)

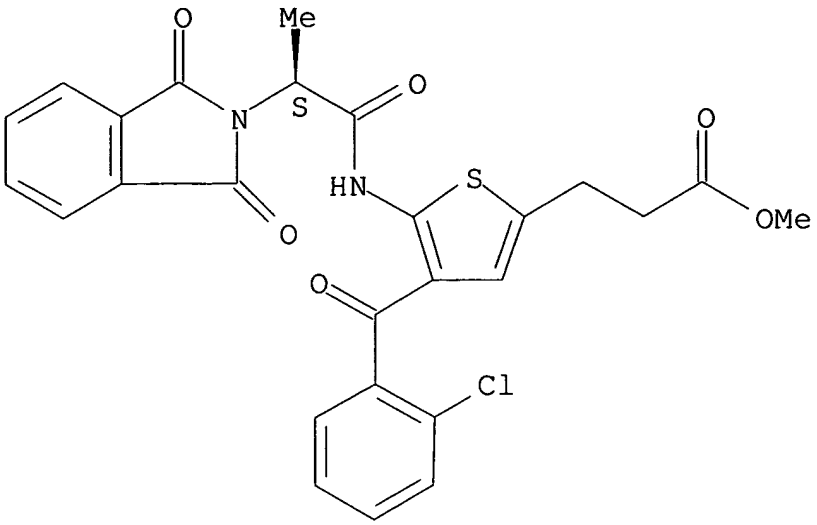
Absolute stereochemistry.



RN 142415-80-3 ZCAPLUS

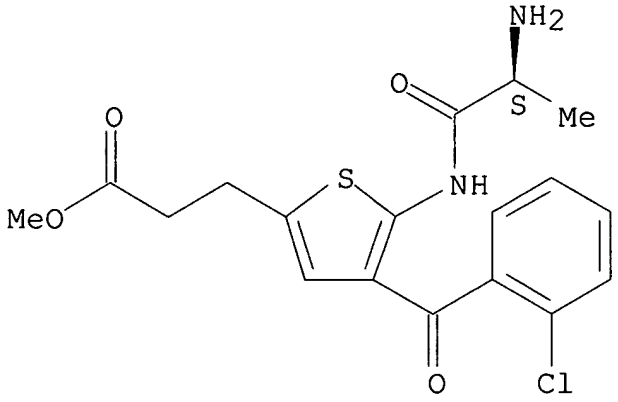
CN 2-Thiophenepropanoic acid, 4-(2-chlorobenzoyl)-5-[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxopropyl]amino]-, methyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



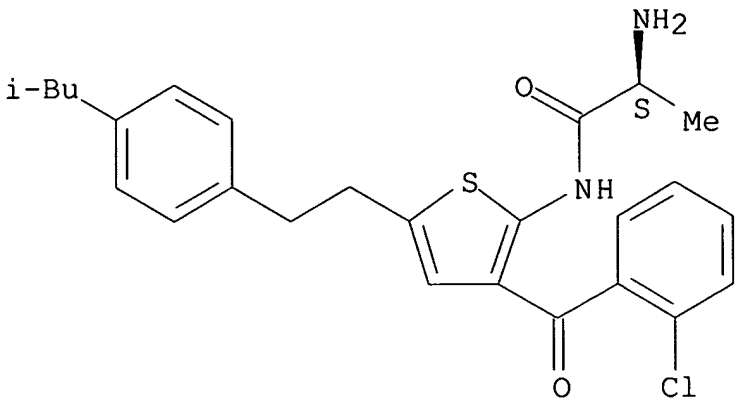
RN 142415-81-4 ZCAPLUS
CN 2-Thiophenepropanoic acid, 5-[(2-amino-1-oxopropyl)amino]-4-(2-chlorobenzoyl)-, methyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



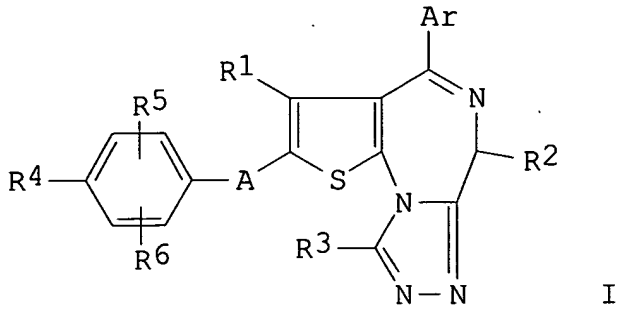
RN 142430-62-4 ZCAPLUS
CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

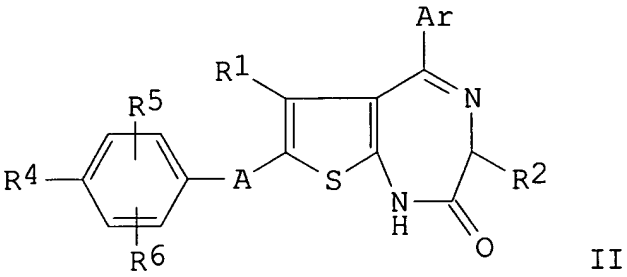


IT **142415-77-8P 142415-80-3P 142415-81-4P**
142430-62-4P
(prepn. of, as intermediate for thienotriazolodiazepine platelet activating factor antagonist)

L20 ANSWER 12 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1992:469891 Document No. 117:69891 Preparation of thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine and thieno[2,3-e][1,4]diazepin-2-one derivatives as platelet activating factor (PAF) antagonists. Moriwaki, Minoru; Kitani, Hiroyuki; Kawakami, Yukio; Terasawa, Michio (Yoshitomi Seiyaku K. K., Japan). Jpn. Kokai Tokkyo Koho JP 04074181 A2 19920309 Heisei, 22 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1990-185587 19900713.
GI



I



II

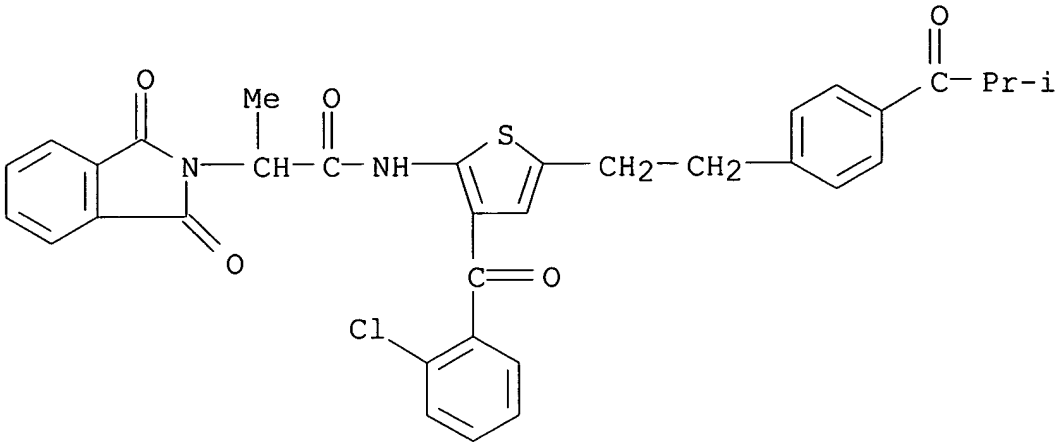
AB The title compds. [I; Ar = pyridyl, (un)substituted Ph; R1 = H, alkyl; R2 = H, alkyl, CF3; R3 = H, (cyclo)alkyl; R4 = (1-3 OH groups-substituted) C2-16 linear or branched alkenyl, alkynyl, aralkenyl, or aralkynyl each having at least one C:C bond and optionally substituted on the aryl ring; R5, R6 = H, halo, alkyl, alkoxy, (un)substituted Ph or PhO; A = (un)substituted alkylene; or AR1 forms a 5- to 7-membered ring] and (II; Ar, R1, R2, R4-R6 = same as above) are prepd. as PAF antagonists which are orally active and show long lasting effect, low toxicity, and little central nervous activity such as tranquilizing and muscle relaxant activity (no data). Thus, 1.2 g P4S10 was added to to a soln. of 1.2 g 5-(2-chlorophenyl)-7-[2-[4-(2-methyl-1-propenyl)phenyl]ethyl]-1,3-dihydro-3-methyl-2H-thieno[2,3-e][1,4]diazepin-2-one (prepn. given) in chloroform, and the mixt. was refluxed for 4 h to give an oil, which was dissolved in THF and stirred with hydrazine monohydrate at room temp. for 1.5 h to give an oil. This oil was dissolved in PhMe, thereto Et orthoacetate was added, and the mixt. was refluxed for 1.5 h to give 0.73 g 4-(2-chlorophenyl)-2-[2-[4-(2-methyl-1-propenyl)phenyl]ethyl]-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine.

IT **142602-97-9P 142603-01-8P 142603-07-4P**
(prepn. of, as intermediate for platelet activating factor antagonist)

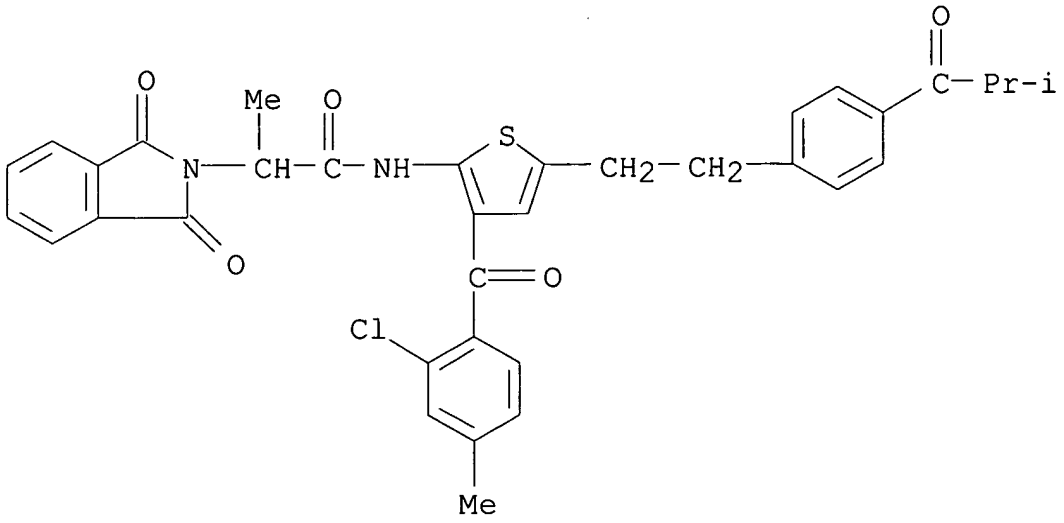
RN 142602-97-9 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methyl-1-oxopropyl)phenyl]ethyl]-2-thienyl]-1,3-dihydro-.alpha.-methyl-1,3-

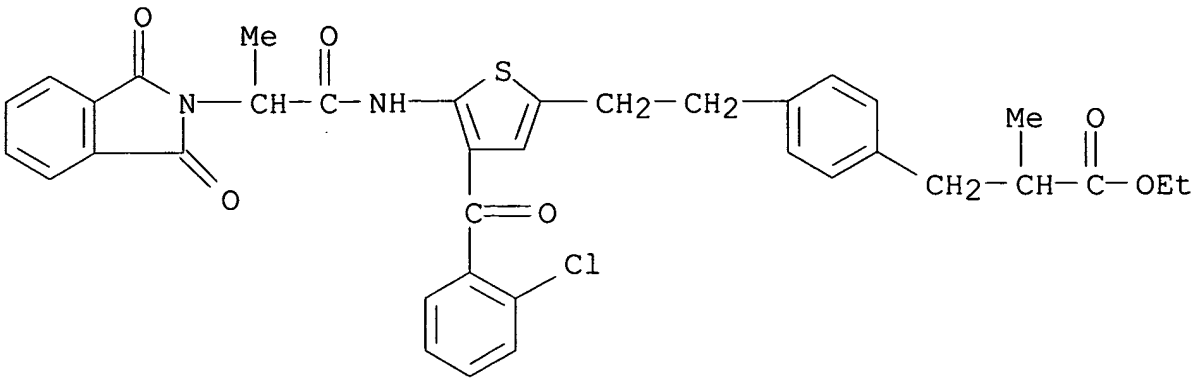
dioxo- (9CI) (CA INDEX NAME)



RN 142603-01-8 ZCAPLUS
CN 2H-Isoindole-2-acetamide, N-[3-(2-chloro-4-methylbenzoyl)-5-[2-[4-(2-methyl-1-oxopropyl)phenyl]ethyl]-2-thienyl]-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)

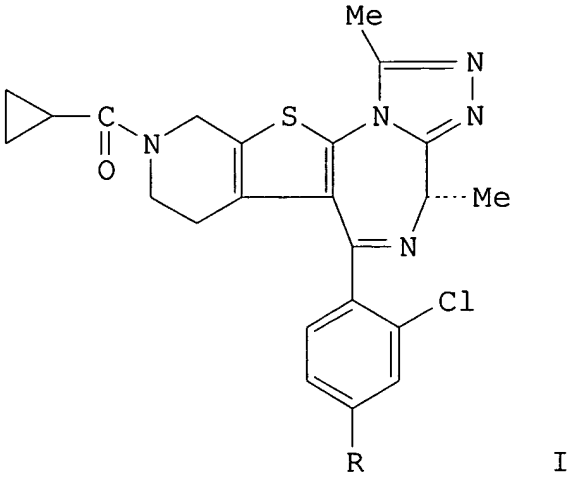


RN 142603-07-4 ZCAPLUS
CN Benzenepropanoic acid, 4-[2-[4-(2-chlorobenzoyl)-5-[[2-(1,3-dihydro-1,3-dioxo-2H-isoindol-2-yl)-1-oxopropyl]amino]-2-thienyl]ethyl]-.alpha.-methyl-, ethyl ester (9CI) (CA INDEX NAME)



IT **142602-97-9P 142603-01-8P 142603-07-4P**
(prepn. of, as intermediate for platelet activating factor antagonist)

L20 ANSWER 13 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1992:426525 Document No. 117:26525 Hapten synthesis for (+)-6-(2-chlorophenyl)-3-cyclopropanecarbonyl-8,11-dimethyl-2,3,4,5-tetrahydro-8H-pyrido[4',3':4,5]thieno[3,2-f]triazolo[4,3-a][1,4]diazepine (E6123). Miyazawa, Shuhei; Okano, Kazuo; Kawahara, Tetsuya; Machida, Yoshimasa; Yamatsu, Isao (Tsukuba Res. Lab., Eisai Co., Ltd., Tsukuba, 300-26, Japan). Chemical & Pharmaceutical Bulletin, 40(3), 762-5 (English) 1992. CODEN: CPBTAL. ISSN: 0009-2363.
GI



I

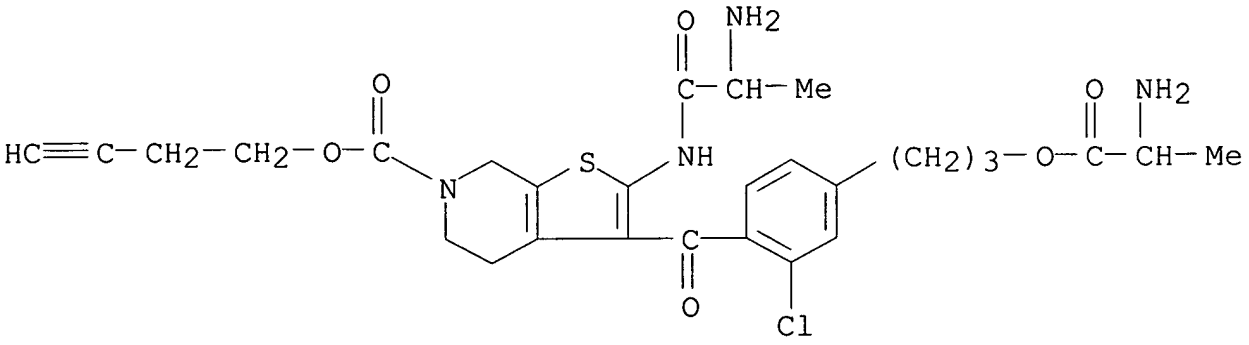
AB In order to examine the pharmacokinetics of E6123 (I; R = H) at low

doses, establishment of a RIA is required. On the basis of the metabolic pattern of I (R = H), the potential hapten I (R = CH2CH2CO2H) was synthesized. For the synthesis, the butynyloxycarbonyl group was developed as a piperidine N-protective group to prevent oxidn. of the methyene at position 2. This protecting group is stable under usual basic and acidic conditions.

IT **141733-78-0P**
(prepn. and intramol. cyclocondensation of, pyridothienodiazepinone from)

RN 141733-78-0 ZCAPLUS

CN Alanine, 3-[4-[[2-[(2-amino-1-oxopropyl)amino]-6-[(3-butynyloxy)carbonyl]-4,5,6,7-tetrahydrothieno[2,3-c]pyridin-3-yl]carbonyl]-3-chlorophenyl]propyl ester (9CI) (CA INDEX NAME)



IT **141733-78-0P**
(prepn. and intramol. cyclocondensation of, pyridothienodiazepinone from)

L20 ANSWER 14 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

1992:174118 Document No. 116:174118 Structure-activity studies on triazolothienodiazepine derivatives as platelet-activating factor antagonists. Miyazawa, Shuhei; Okano, Kazuo; Shimomura, Naoyuki; Clark, Richard S. J.; Kawahara, Tetsuya; Asano, Osamu; Yoshimura, Hiroyuki; Miyamoto, Mituaki; Sakuma, Yoshinori; et al. (Tsukuba Res. Lab., Eisai Co., Ltd., Tsukuba, 300-26, Japan). Chemical & Pharmaceutical Bulletin, 39(12), 3215-20 (English) 1991. CODEN: CPBTAL. ISSN: 0009-2363.

GI For diagram(s), see printed CA Issue.

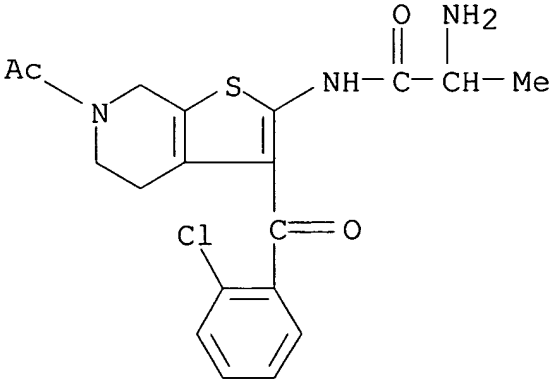
AB Title compds. I (R = HC.tplbond.CCH2, NCCMe2O2C, 4-FC6H4CH2CO, etc., R1 = R2 = H; R = HC.tplbond.CCH2CH2O2C, R1,R2 = H, Me, Et; R = NCCMe2O2C, cyclopropanecarbonyl, R1 = Me, R2 = H) were prepd. and their structure-activity relationship as platelet-activating factor antagonists was examd. Thus, I (R = R1 = R2 = H) reacted with HC.tplbond.CCH2Br to give I (R = HC.tplbond.CCH2). Introducing a Me group into the 8-position of the thienodiazepine nucleus leads to a

longer duration of action.

IT **130311-71-6P**
(prepn. and intramol. cyclocondensation of)

RN 130311-71-6 ZCAPLUS

CN Propanamide, N-[6-acetyl-3-(2-chlorobenzoyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridin-2-yl]-2-amino- (9CI) (CA INDEX NAME)

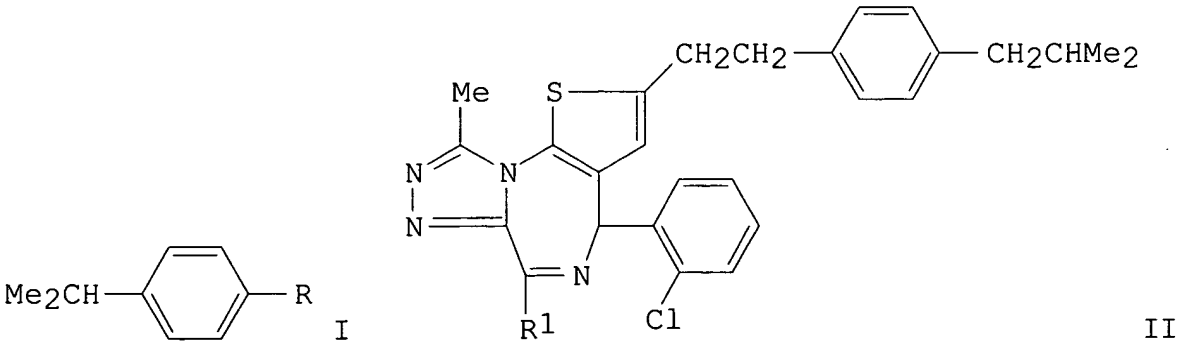


IT **130311-71-6P**
(prepn. and intramol. cyclocondensation of)

L20 ANSWER 15 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

1991:583377 Document No. 115:183377 Process for preparation of 4-(4-isobutylphenyl)butyraldehyde and its use for the preparation of (-)-4-(2-chlorophenyl)-2-[2-(4-isobutylphenyl)ethyl]-6,9-dimethyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-b][1,4]diazepine. Stransky, Werner; Brandt, Klaus; Knorr, Hansjorg; Birke, Franz; Heuer, Hubert (Boehringer Ingelheim International G.m.b.H., Germany). Can. Pat. Appl. CA 2027076 AA 19910411, 15 pp. (English). CODEN: CPXXEB. APPLICATION: CA 1990-2027076 19901005. PRIORITY: DE 1989-3933781 19891010; DE 1989-3936766 19891104.

GI



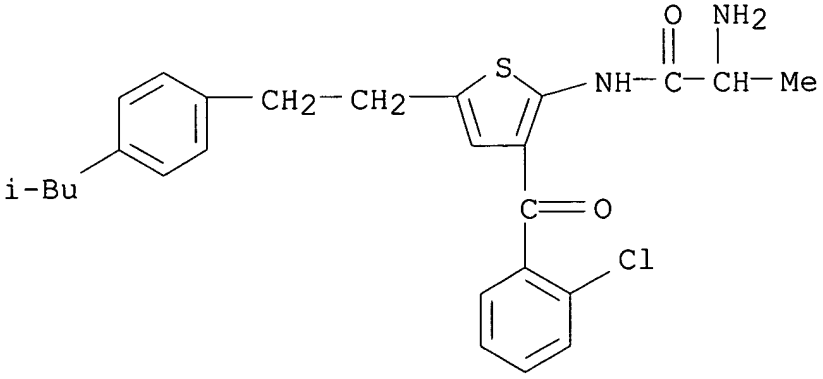
I II

AB The title aldehyde I [R = (CH2)3CHO] was prepd. in 3 steps from I (R = H) by Friedel-Crafts acylation with ClCO(CH2)2CO2Me catalyzed by AlCl3 in CS2, hydrogenation over Pd or Pt in AcOH to give I [R = (CH2)3CO2Me], and redn. by DIBAL in PhMe. The aldehyde is suitable as a starting compd. for the synthesis of thienotriazolodiazepines, e.g. II (R1 = H, Me), which are useful as blood platelet activating factor antagonists.

IT **127113-13-7P**
(intermediate for prepn. of thienotriazolodiazepines and its NMR)

RN 127113-13-7 ZCAPLUS

CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]- (9CI) (CA INDEX NAME)



IT **127113-13-7P**
(intermediate for prepn. of thienotriazolodiazepines and its NMR)

L20 ANSWER 16 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

1991:514558 Document No. 115:114558 New heterocycle-fused diazepines acting as PAF antagonists and their use as drugs. Weber, Karl Heinz; Stransky, Werner; Walther, Gerhard; Kuefner-Muehl, Ulrike; Heuer, Hubert; Birke, Franz; Muacevic, Gojko; Bechtel, Wolf Dietrich (Boehringer Ingelheim K.-G., Germany; Boehringer Ingelheim International G.m.b.H.). Eur. Pat. Appl. EP 407955 A1 19910116, 89 pp. DESIGNATED STATES: R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE. (German). CODEN: EPXXDW. APPLICATION: EP 1990-113130 19900710. PRIORITY: DE 1989-3922944 19890712; DE 1990-4011345 19900407.

GI

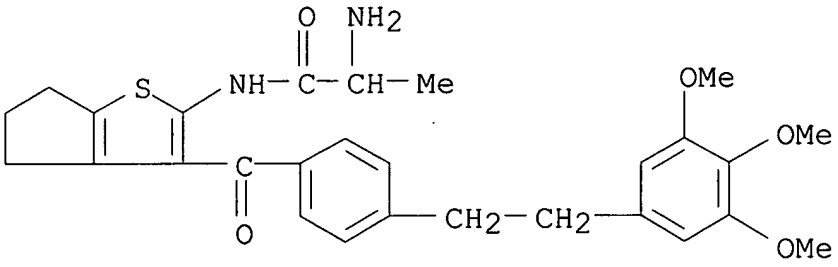
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Fused diazepines, such as I, were prepd., and pharmaceutical formulations contg. them were given. Thus, hydrazone II was refluxed with MeC(OEt)3 in EtOH for 1 h to give 28% I. The prepn. of II in several steps, starting from 4-HOCH2C6H4CO2Me, was described.

IT **134779-11-6P**
(prepn. and conversion to diazepinone deriv.)

RN 134779-11-6 ZCAPLUS

CN Propanamide, 2-amino-N-[5,6-dihydro-3-[4-[2-(3,4,5-trimethoxyphenyl)ethyl]benzoyl]-4H-cyclopenta[b]thien-2-yl]- (9CI) (CA INDEX NAME)

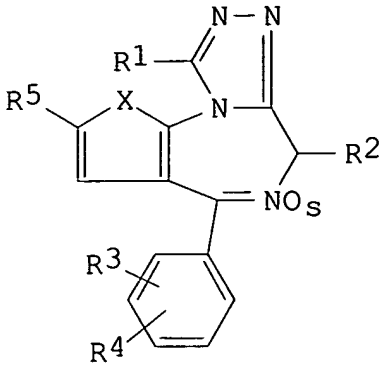


IT **134779-11-6P**
(prepn. and conversion to diazepinone deriv.)

L20 ANSWER 17 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

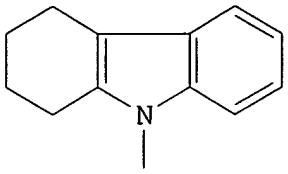
1991:143456 Document No. 114:143456 Preparation and formulation of (heterocyclylethynyl)-triazolo[4,3-a]benzodiazepines and -thieno[3,2-f][1,2,4] triazolo [4,3-a][1,4] diazepines and analogs as platelet activating factor antagonists. Walser, Armin (Hoffmann-La Roche, Inc., USA). U.S. US 4959361 A 19900925, 52 pp. Cont.-in-part of U.S. Ser. No. 227,948, abandoned. (English). CODEN: USXXAM. APPLICATION: US 1988-252964 19881003. PRIORITY: US 1987-134726 19871218; US 1988-227948 19880803.

GI



I

Q=

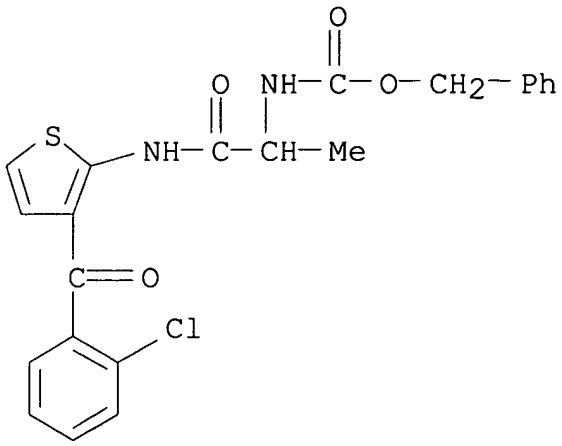


AB The title compds. [I; R1 = alkyl, alkoxy, CF3; R2 = H, alkyl, alkoxy, OH, AcO; R3, R4 = H, Cl, F, alkyl, alkoxy; R5 = R6(CH2)nC.tplbond.C, R7O(CH2)mC.tplbond.C; R6, R7 = aryl, heterocyclyl; X = CH:CH, S; m = 1, 2; n = 0-2; s = 0, 1] were prepd. Thus, I (R1 = Me, R2 = R3 = H, R4 = 2-Cl, R5 = iodo, X = S, s = 0) was stirred 20 h with RCH2C.tplbond.CH (R = tetrahydrocarbazolo group Q) in DMF contg. Et3N, CuI, Ph3P, and Pd(OAc)2 to give I (R5 = C.tplbond.CCH2Q; R1, R2, R3, R4, X, s = same as above) which had ID50 of 0.006 mg/kg orally against platelet activating factor-induced bronchoconstriction in guinea pigs.

IT **132456-40-7P**
(prepn. and reaction of, in prepn. of platelet activating factor antagonist)

RN 132456-40-7 ZCAPLUS

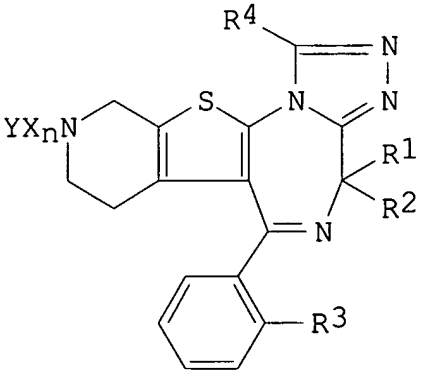
CN Carbamic acid, [2-[[3-(2-chlorobenzoyl)-2-thienyl]amino]-1-methyl-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



IT **132456-40-7P**
(prepn. and reaction of, in prepn. of platelet activating factor antagonist)

L20 ANSWER 18 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1990:612028 Document No. 113:212028 Preparation of 8H-pyrido[4',3':4,5]thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepines as platelet activating factor (PAF) inhibitors. Okano, Kazuo; Miyazawa, Shuhei; Clark, Richard Stephen John; Abe, Shinya; Kawahara, Tetsuya; Shimomura, Naoyuki; Asano, Osamu; Yoshimura, Hiroyuki; Miyamoto, Mitsuaki; et al. (Eisai Co., Ltd., Japan). Eur. Pat. Appl. EP 367110 A1 19900509, 135 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1989-119910 19891026. PRIORITY: JP 1988-275460 19881031; JP 1988-297068 19881124; JP 1988-318016 19881216; JP 1988-331622 19881228.

GI



I

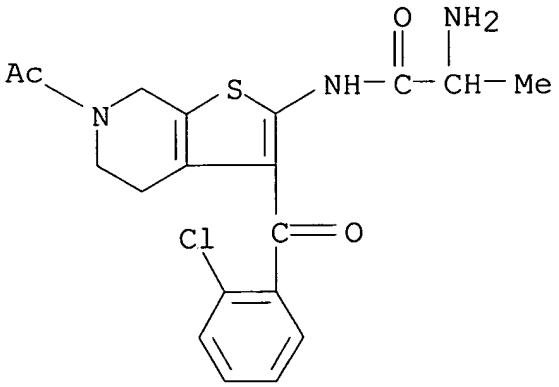
AB Title compds. I (R1, R2 = H, alkyl; R3 = H, halo; R4 = H, alkyl; X = O2C, R5NCO, R5 = H, alkyl, R6OP(O)O, R6 = alkyl, SO2; n = 0, 1; Y = (un)substituted cycloalkyl, cycloalkylalkyl, alkynyl, alkylnitrilo, nitrilophenyl, heterocyclylalkyl, arylalkyl, arylalkenyl, cyclopropylalkenyl, etc.) are prepd. as PAF inhibitors; I are useful in treatment of allergic and asthmatic diseases. 1-Cyano-1-methylethyl Ph carbonate and 6-(2-chlorophenyl)-11-methyl-2,3,4,5-tetrahydro-8H-pyrido[4',3':4,5]thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine in CHCl3 were heated at 120.degree. for 1 h to give I (R1 = R2 = H; R3 = Cl; R4 = Me; YXn = NCCMe2O2C) (II). In a PAF receptor binding assay to human platelet the IC50 for II was 0.0033 .mu.M.

IT **130311-71-6P 130311-82-9P 130311-88-5P 130311-94-3P**
(prepn. and reaction of, in prepn. of platelet activating factor

inhibitors)

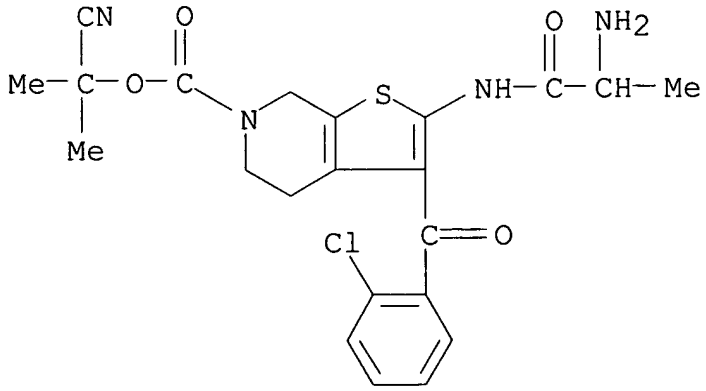
RN 130311-71-6 ZCAPLUS

CN Propanamide, N-[6-acetyl-3-(2-chlorobenzoyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridin-2-yl]-2-amino- (9CI) (CA INDEX NAME)



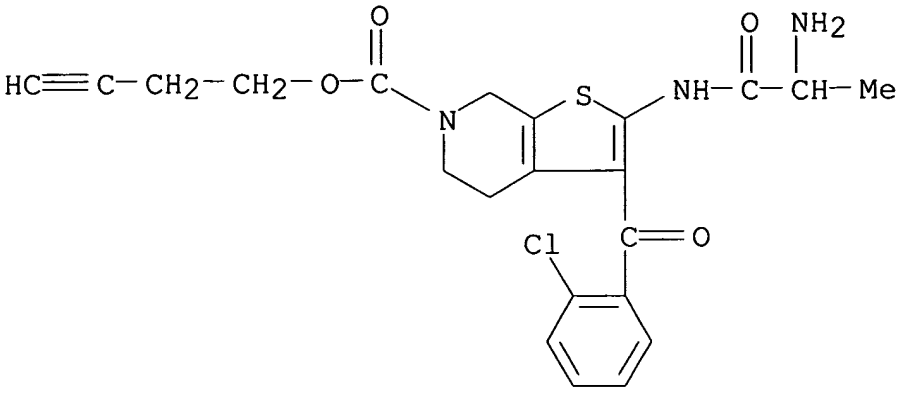
RN 130311-82-9 ZCAPLUS

CN Thieno[2,3-c]pyridine-6(5H)-carboxylic acid, 2-[(2-amino-1-oxopropyl)amino]-3-(2-chlorobenzoyl)-4,7-dihydro-, 1-cyano-1-methylethyl ester (9CI) (CA INDEX NAME)

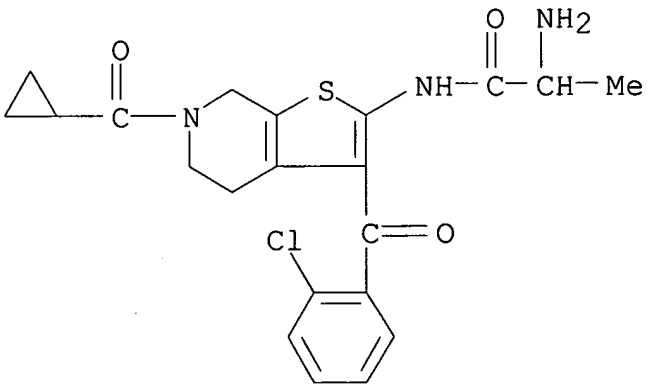


RN 130311-88-5 ZCAPLUS

CN Thieno[2,3-c]pyridine-6(5H)-carboxylic acid, 2-[(2-amino-1-oxopropyl)amino]-3-(2-chlorobenzoyl)-4,7-dihydro-, 3-butynyl ester (9CI) (CA INDEX NAME)



RN 130311-94-3 ZCAPLUS
CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-6-(cyclopropylcarbonyl)-4,5,6,7-tetrahydrothieno[2,3-c]pyridin-2-yl]- (9CI) (CA INDEX NAME)



IT **130311-71-6P 130311-82-9P 130311-88-5P**
130311-94-3P
(prepn. and reaction of, in prepn. of platelet activating factor inhibitors)

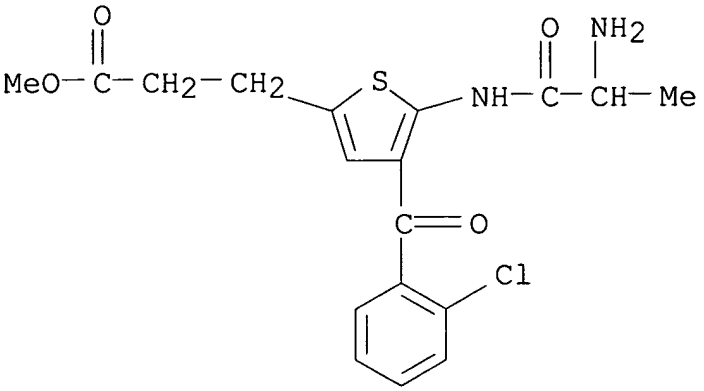
L20 ANSWER 19 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1990:591406 Document No. 113:191406 Preparation of thienobenzodiazepines as platelet activating factor antagonists. Weber, Karl Heinz; Walther, Gerhard; Stransky, Werner; Birke, Franz; Muacevic, Gojko; Heuer, Hubert; Bechtel, Wolf Dietrich (Boehringer Ingelheim K.-G., Germany). Ger. Offen. DE 3936828 A1 19900510, 64 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1989-3936828 19891104. PRIORITY: DE 1988-3837693 19881106.
GI For diagram(s), see printed CA Issue.
AB The title compds. [I and II; R1 = H, (HO- or halo-substituted)

alkyl, cyclopropyl, cyclobutyl, cyclopentyl, alkoxy; R2 = substituted alkyl, alkenyl, alkynyl; R3 = H, (substituted) Ph; R2R3 = atoms to complete a substituted 5-7 membered ring; R4 = pyridyl, (substituted) Ph; R5 = OH, (substituted) alkyl, alkylcarbonyloxy, alkoxycarbonyl, alkoxycarbonylalkyl; R6 = H, alkyl, acyl; X, Y = N, CR1; Y = CCO2R7; R7 = H, alkyl] were prepd. as platelet activating factor (PAF) antagonists. Thus, 2-carboxyethyl-4-(2-chlorophenyl)-6,9-dimethyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a][1,4]diazepine [prepn. from Me 3-[2-amino-3-(2-chlorobenzoyl)thiophen-4-yl]propionate given]in CH2Cl2 was treated with 1,1'-carbonyldiimidazole and then morpholine to give morpholide III. I inhibited PAF-induced platelet aggregation with IC50's of 0.09-0.67 .mu.M.

IT **130066-95-4P**
(prepn. of, as intermediates for thienotriazolodiazepine platelet activating factor antagonist)

RN 130066-95-4 ZCAPLUS

CN 2-Thiophenepropanoic acid, 5-[(2-amino-1-oxopropyl)amino]-4-(2-chlorobenzoyl)-, methyl ester (9CI) (CA INDEX NAME)

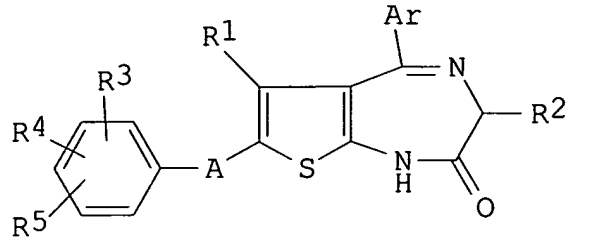


IT **130066-95-4P**
(prepn. of, as intermediates for thienotriazolodiazepine platelet activating factor antagonist)

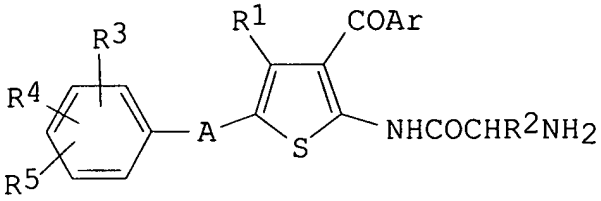
L20 ANSWER 20 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

1990:216977 Document No. 112:216977 Preparation of 7-phenylalkyl-1,3-dihydro-2H-thieno[2,3-e]-1,4-diazepin-2-one derivatives as platelet activating factor (PAF) antagonists. Tawara, Tetsuya; Moriwaki, Minoru; Abe, Yukio; Yuasa, Shuji (Yoshitomi Pharmaceutical Industries, Ltd., Japan). Jpn. Kokai Tokkyo Koho JP 01287085 A2 19891117 Heisei, 9 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1988-115369 19880512.

GI



I



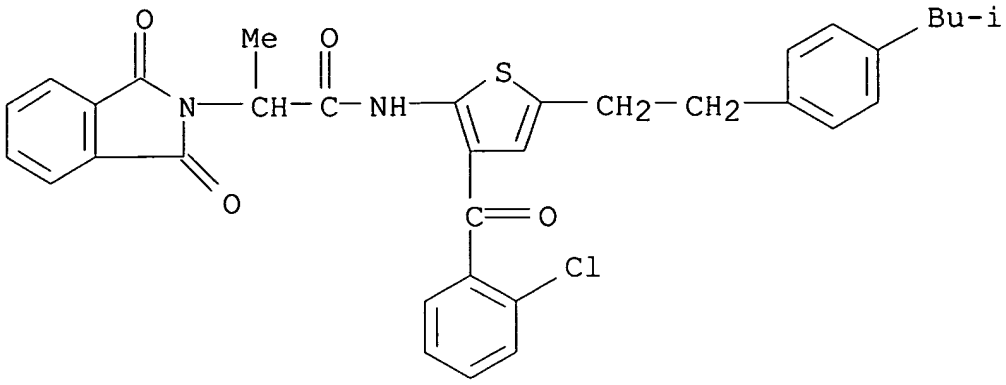
II

AB The title compds. [I; Ar = pyridyl, (un)substituted Ph; A = (alkyl-substituted) C1-8 alkylene; R1, R2 = H, alkyl; R3-R5 = H, halo, OH, straight-chain or branched C1-8 alkyl, C1-8 alkoxy, (un)substituted Ph, aralkyl, aralkyloxy, or PhO] also having vasodilatory activity and thus useful as cardiovascular agents, e.g. for treatment of heart failure, with very weak central nervous system activity such as analgesic and anticonvulsant activity (no data), are prepd. by cyclization of thiazole derivs. (II). Thus, acylation of 2-amino-3-(2-chlorobenzoyl)-5-[2-(4-isobutylphenyl)ethyl]thiophene by N-phthalylglycyl chloride in refluxing CHCl3 followed by treatment with H2NNH2.H2O in EtOH gave II (Ar = 2-ClC6H4, R1-R4 = H, R5 = Me2CHCH2, A = CH2CH2) which was refluxed .apprx.20 h in AcOH/Me2CHOH to give I (Ar = 2-ClC6H4, R1-R4 = H, R5 = Me2CHCH2, A = CH2CH2). Thirty-six I were prepd.

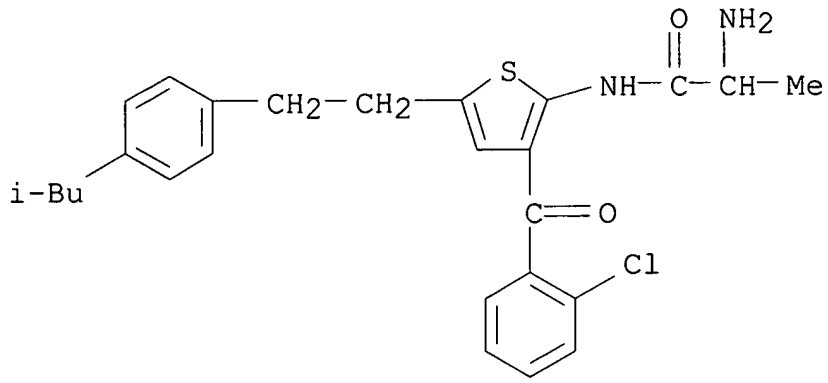
IT **127113-12-6P 127113-13-7P**
(prepn. of, as intermediate for (phenylalkyl)dihydrothienodiazepinone vasodilator and platelet activating factor antagonist)

RN 127113-12-6 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)



RN 127113-13-7 ZCAPLUS
CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-5-[2-[4-(2-methylpropyl)phenyl]ethyl]-2-thienyl]- (9CI) (CA INDEX NAME)



IT **127113-12-6P 127113-13-7P**
(prepn. of, as intermediate for (phenylalkyl)dihydrothienodiazepinone vasodilator and platelet activating factor antagonist)

L20 ANSWER 21 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1990:216937 Document No. 112:216937 Preparation of thienotriazolodiazepines as blood platelet aggregation inhibitors. Moriwaki, Minoru; Akiyama, Youichi; Demizu, Kenichi; Mikashima, Hiroshi (Yoshitomi Pharmaceutical Industries, Ltd., Japan). Eur. Pat. Appl. EP 342587 A2 19891123, 21 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1989-108752 19890516. PRIORITY: JP 1988-119713 19880517.
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

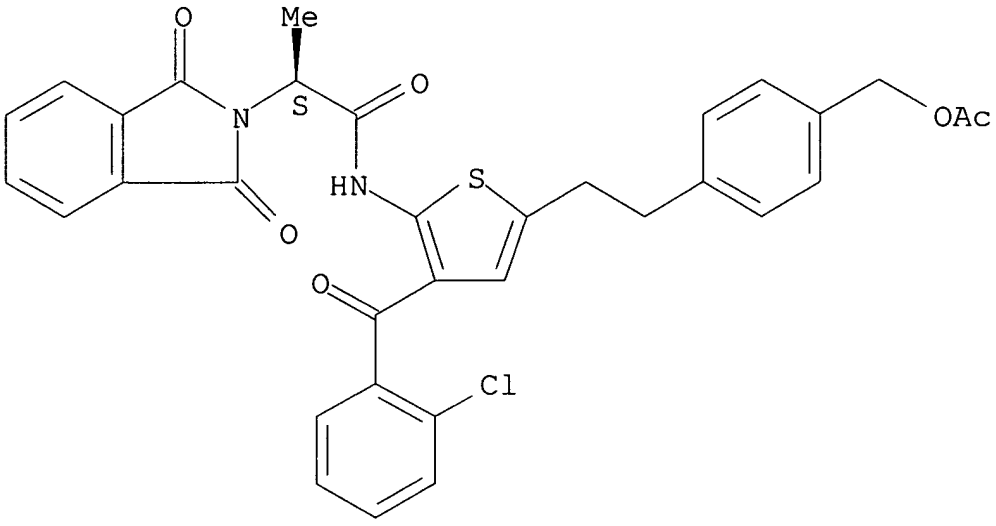
AB The title compd. [I; R1, R2, R3 = H, alkyl, CF3; R4 = H, alkyl, etc.; Ar = pyridyl, (substituted) phenyl; Z = CH2, CO, CH(OH); a = alkylene] and their pharmaceutical acceptable salts, inhibitors of platelet-activating factor and therefore useful as blood platelet aggregation inhibitors, are prepd. Thiophene derivs. II (prepn. given) was cyclized and the product (III) (X = O) converted to the thione III (X = S). This was cyclocondensed with MeNHNH2 to give I [R1 = H, R2 = R3 = Me, R4Z = p-AcOCH2C6H4, Ar = o-ClC6H4, A = CH2CH2]. In in vitro study I [R1 = H, R2 = R3 = Me, A = CH2CH2, Ar = o-ClC6H4, R4Z = p-Me2CHCH(OH)C6H4] had an IC50 of 0.01-0.03 .mu.g/mL against platelet-activating factor-induced platelet aggregation. A tablet and a powder were formulated contg. I.

IT **127048-69-5P 127048-70-8P**
(prepn. and reaction of, in prepn. of platelet-activating factor-induced platelet aggregation)

RN 127048-69-5 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-[5-[2-[4-[(acetyloxy)methyl]phenyl]ethyl]-3-(2-chlorobenzoyl)-2-thienyl]-1,3-dihydro-.alpha.-methyl-1,3-dioxo-, (S)- (9CI) (CA INDEX NAME)

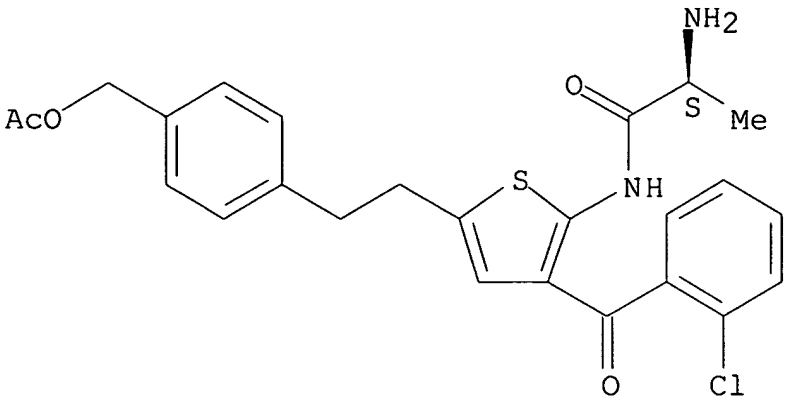
Absolute stereochemistry.



RN 127048-70-8 ZCAPLUS

CN Propanamide, N-[5-[2-[4-[(acetyloxy)methyl]phenyl]ethyl]-3-(2-chlorobenzoyl)-2-thienyl]-2-amino-, (S)- (9CI) (CA INDEX NAME)

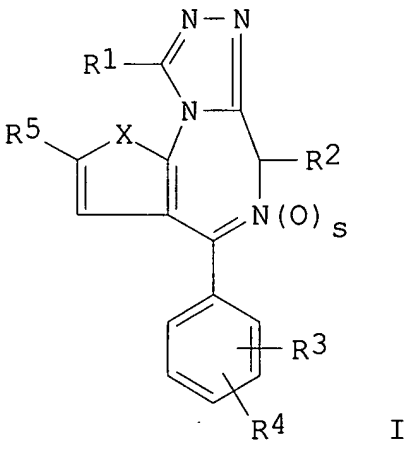
Absolute stereochemistry.



IT **127048-69-5P 127048-70-8P**
(prepn. and reaction of, in prepn. of platelet-activating factor-induced platelet aggregation)

L20 ANSWER 22 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1990:118862 Document No. 112:118862 Preparation and formulation of triazolodiazepine derivatives as platelet activator factor antagonists. Walser, Armin (Hoffmann-La Roche, F., und Co. A.-G., Switz.). Eur. Pat. Appl. EP 320992 A2 19890621, 70 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1988-121165 19881216. PRIORITY: US 1987-134726 19871218; US 1988-227948 19880803.

GI



I

AB Title compds. [I; R1 = alkyl, alkoxy, F3C; R2 = H, alkyl, alkoxy, HO, alkanoyloxy; R3,R4 = H, Cl, F, alkyl, alkoxy; R5 =

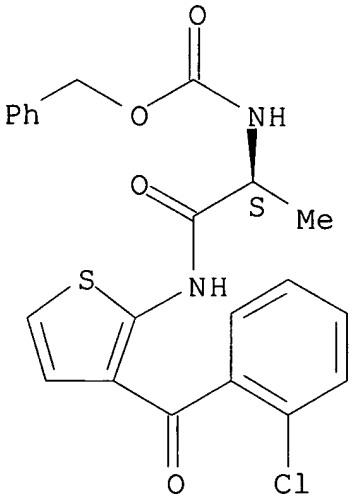
R6(CH2)nC.tplbond.C, R6,R7 = aryl, heterocyclyl; X = CH:CH, S; m = 1,2; n = 0-2; s = 0,1, with the proviso that when s = 1, R2 .noteq. HO, alkoxy, alkanoyloxy; when n = 0, R6 must be attached through a C to C bond, and that R7 is always attached through a C to O bond] their enantiomers, racemates and pharmaceutically acceptable acid addn. salts thereof, are prepd. I are useful in diseases characterized by excess platelet activating factor (PAF) or for prevention and treatment of cardiovascular disease, pulmonary disease, immunolog. disorder, inflammatory disease, dermatol. disorders and transplant rejection. 4-(2-Chlorophenyl)-2-iodo-9-methyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a]diazepine was reacted with 1-(2-propynyl)-1H-indazole to give I (R1 = Me; R2, R4 = H; R3 = 2-Cl; R5 = [3-(1H-indazol-1-yl)-1-propynyl]; X = S; s = 0 (II). II inhibited PAF binding to dog platelets with an IC50 of 1.0 mM and inhibited of PAF-induced bronchoconstriction in guinea pigs with an i.v. ID50 of 0.002 mg/kg. An oral suspension comprised 2-[3-[4-(2-chlorophenyl)-9-methyl-6H-thieno[3,2-f][1,2,4]triazolo[4,3-a]diazepin-2-yl]-2-propynyl]-1H-benz[de]isoquinoline-1,3(2H)-dione 5.0, hydroxypropylmethyl cellulose 8.0, polysorbate 80 0.5 g and distd. water to 100 mL.

IT **125030-99-1P**
(prepn. and cyclization of)

RN 125030-99-1 ZCAPLUS

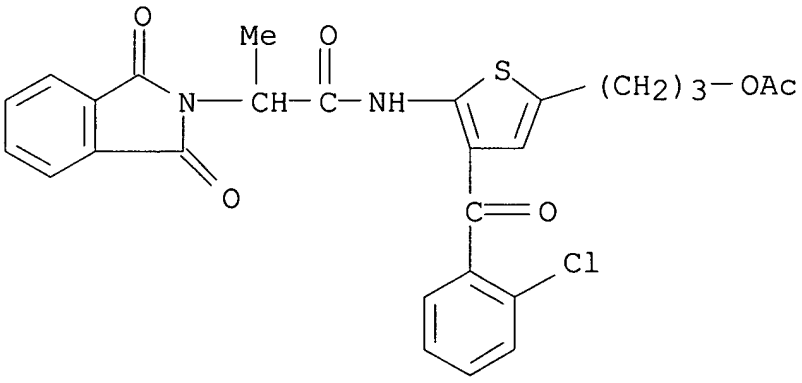
CN Carbamic acid, [2-[[3-(2-chlorobenzoyl)-2-thienyl]amino]-1-methyl-2-oxoethyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



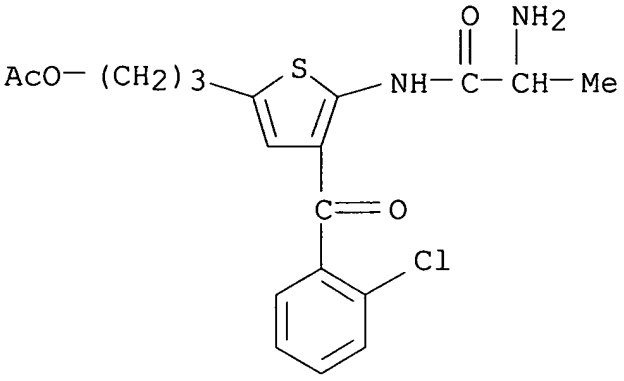
IT **125030-99-1P**
(prepn. and cyclization of)

L20 ANSWER 23 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1990:77237 Document No. 112:77237 Preparation and formulation of thienotriazolodiazepines as platelet-activating factor (PAF) antagonists. Moriwaki, Minoru; Tanaka, Hiroshi; Terasawa, Michio; Tahara, Tetsuya (Yoshitomi Pharmaceutical Industries, Ltd., Japan). Eur. Pat. Appl. EP 328924 A2 19890823, 50 pp. DESIGNATED STATES: R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE. (English). CODEN: EPXXDW. APPLICATION: EP 1989-101581 19890130. PRIORITY: JP 1988-20400 19880130; JP 1988-103221 19880426; JP 1988-308365 19881206; JP 1988-311688 19881208.
GI For diagram(s), see printed CA Issue.
AB The title compds. [I; R1 = H, (substituted) alkyl, cycloalkyl, aryl, aralkyl, etc.; R2 = C1-6 alkyl, CF3; R3 = (substituted) Ph, pyridyl; R4 = hydroxyalkyl, carbamoylalkyl, etc.; A ring = thiophene, cyclopentathiophene, etc.], useful in the prevention and treatment of various PAF-induced diseases, are prepd. To a suspension of 6 g thione II (prepn. given) in MeOH was added 100% N2H4.H2O with stirring under cooling and then at room temp., MeOH was distd. in vacuo, the residue dissolved in CHCl3, concd., dissolved in MePh, and refluxed with MeC(OEt)3 to give 3 g III. Similarly prepd. were 23 addnl. I which showed PAF antagonist activity at ED50 of 0.065-0.55 mg/kg p.o. in mice. Tablet and powder formulations were given.
IT **125115-72-2P 125115-73-3P 125115-83-5P**
125115-88-0P 125115-93-7P 125142-11-2P
(prepn. and reaction of, in prepn. of platelet-activating factor antagonists)
RN 125115-72-2 ZCAPLUS
CN 2H-Isoindole-2-acetamide, N-[5-[3-(acetyloxy)propyl]-3-(2-chlorobenzoyl)-2-thienyl]-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)

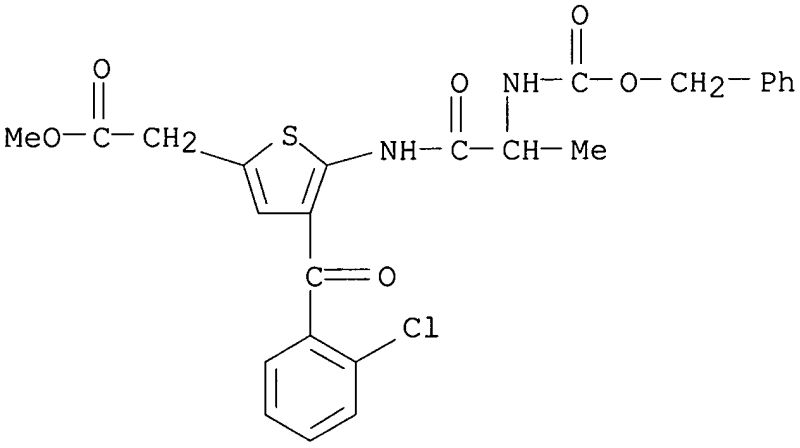


RN 125115-73-3 ZCAPLUS
CN Propanamide, N-[5-[3-(acetyloxy)propyl]-3-(2-chlorobenzoyl)-2-

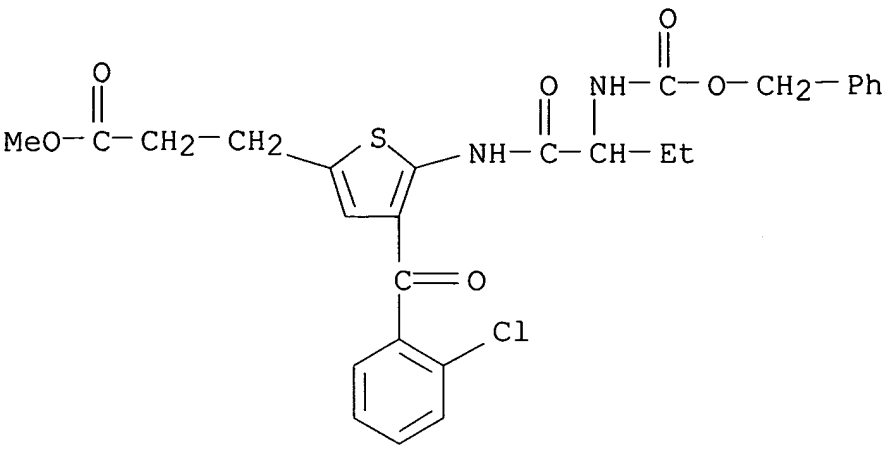
thienyl]-2-amino- (9CI) (CA INDEX NAME)



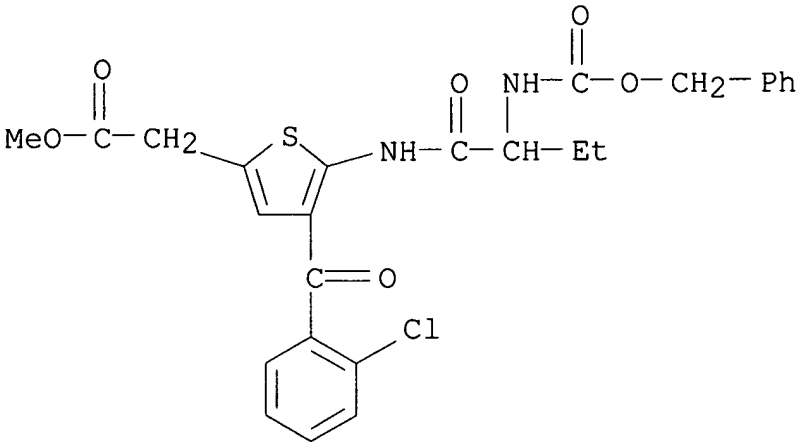
RN 125115-83-5 ZCAPLUS
CN 2-Thiopheneacetic acid, 4-(2-chlorobenzoyl)-5-[[1-oxo-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



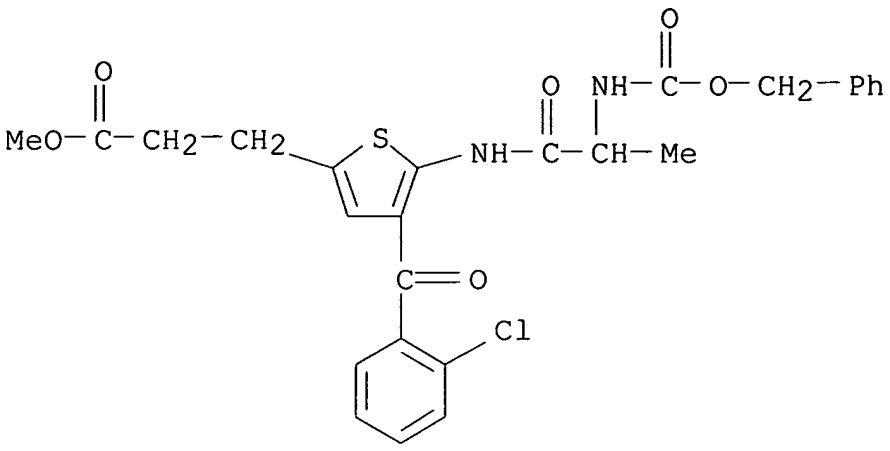
RN 125115-88-0 ZCAPLUS
CN 2-Thiophenepropanoic acid, 4-(2-chlorobenzoyl)-5-[[1-oxo-2-[[(phenylmethoxy)carbonyl]amino]butyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



RN 125115-93-7 ZCAPLUS
CN 2-Thiopheneacetic acid, 4-(2-chlorobenzoyl)-5-[[1-oxo-2-[[(phenylmethoxy)carbonyl]amino]butyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



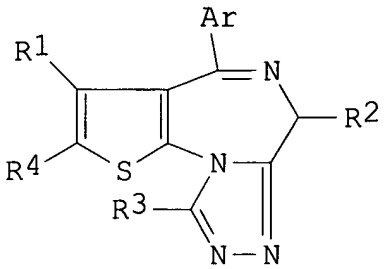
RN 125142-11-2 ZCAPLUS
CN 2-Thiophenepropanoic acid, 4-(2-chlorobenzoyl)-5-[[1-oxo-2-[[(phenylmethoxy)carbonyl]amino]propyl]amino]-, methyl ester (9CI) (CA INDEX NAME)



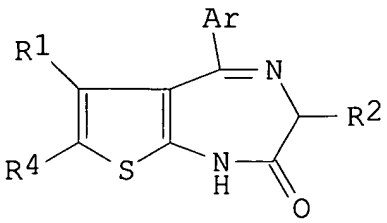
IT **125115-72-2P 125115-73-3P 125115-83-5P**
125115-88-0P 125115-93-7P 125142-11-2P
(prepn. and reaction of, in prepn. of platelet-activating factor antagonists)

L20 ANSWER 24 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1989:173267 Document No. 110:173267 Preparation of thienotriazolodiazepine derivatives as cardiovascular agents. Moriwaki, Minoru; Abe, Masao; Mikashima, Hiroshi; Tahara, Tetsuya (Yoshitomi Pharmaceutical Industries, Ltd., Japan). PCT Int. Appl. WO 8809333 A1 19881201, 75 pp. DESIGNATED STATES: W: US; RW: AT, BE, CH, DE, FR, GB, IT, NL, SE. (Japanese). CODEN: PIXXD2. APPLICATION: WO 1988-JP506 19880525. PRIORITY: JP 1987-132058 19870528; JP 1987-137195 19870529; JP 1987-149698 19870616.

GI



I



II

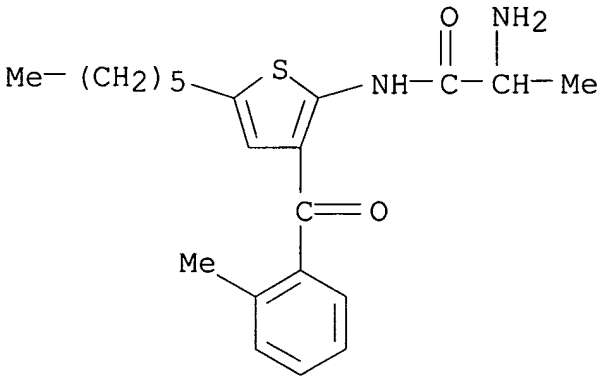
AB Thienotriazolodiazepine derivs. [I; Ar = (substituted) Ph, (substituted) pyridyl; R1, R3 = H, C1-4 alkyl; R2 = H, C1-4 alkyl, CF3; R4 = straight chain or branched C6-18 alkyl, alkenyl, or alkynyl] and thienodiazepine derivs. (II; Ar, R1-R4 = same as

defined above) and pharmaceutically acceptable salts thereof, useful as cardiovascular agents, were prepd. Treatment of 2-ClC6H4COCH2CN with S and Me(CH2)6CHO in EtOH/DMF at 55-60.degree. gave 2-amino-3-(2-chlorobenzoyl)-5-hexylthiophene which underwent amidation with ClCH2COCl followed by amination with NH3 to give 2-aminoacetamido-3-(2-chlorobenzoyl)-5-hexylthiophene. Refluxing the latter with AcOH in iso-BrOH for 5 h gave II (Ar = 2-ClC6H4, R1 = R2 = H, R4 = hexyl) which was reacted with P4S10 to give a thione. Condensation of the latter with N2H4.cntdot.H2O in EtOH followed by reaction with Ac2O in PhMe contg. AcOH under reflux gave I (Ar = 2-ClC6H4, R1 = R2 = H, R4 = hexyl, R3 = Me) (III). III inhibited a platelet activating factor-induced blood platelet aggregation with an IC50 of 0.03-0.1 .mu.g/mL, using rabbit platelet rich plasma.

IT **120135-67-3P**
(prepn. of, as intermediate for thienotriazolodiazepine cardiovascular agent)

RN 120135-67-3 ZCAPLUS

CN Propanamide, 2-amino-N-[5-hexyl-3-(2-methylbenzoyl)-2-thienyl]-(9CI) (CA INDEX NAME)



IT **120135-67-3P**
(prepn. of, as intermediate for thienotriazolodiazepine cardiovascular agent)

L20 ANSWER 25 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

1975:497405 Document No. 83:97405 Thienodiazepine derivatives. (Laboratorios Made S. A., Spain; Patronato de Investigacion Cientifica y Tecnica "Juan de la Cierva"). Span. ES 393101 19740516, 33 pp. (Spanish). CODEN: SPXXAD. APPLICATION: ES 1971-393101 19710709.

GI For diagram(s), see printed CA Issue.

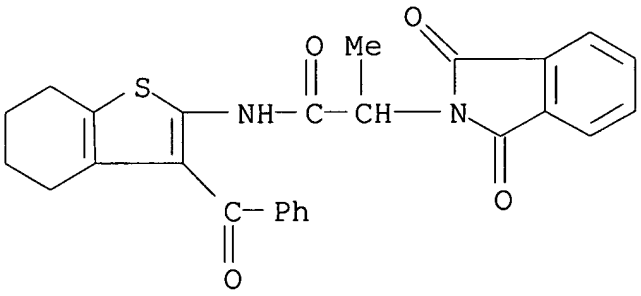
AB Thienodiazepines I (R = H, Cl, R1R2 = (CH2)4; R = R2 = H, R1 = Me) were prepd. by acylating II (R3 = H) and cyclizing II (R3 = COCH2R4, R4 = NHCO2CH2Ph, Cl, Br, N3, phthalimido) with acid, NH3, or N2H4.

II (R1R2 = (CH2)3, (CH2)4, R1 = H, Me, R2 = H; R = H, 4-OMe, 3-Cl, 3-NO2, 4-Cl) were prepd. by condensing RC6H4COCH2CN with R1COCH2R2 and S.

IT **40312-47-8P 40312-48-9P 40312-49-0P 56416-49-0P**
(prepn. of)

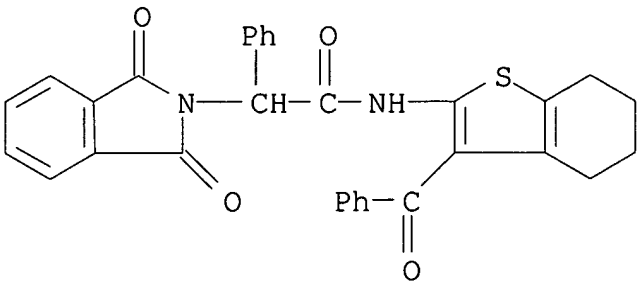
RN 40312-47-8 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-(3-benzoyl-4,5,6,7-tetrahydrobenzo[b]thien-2-yl)-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)



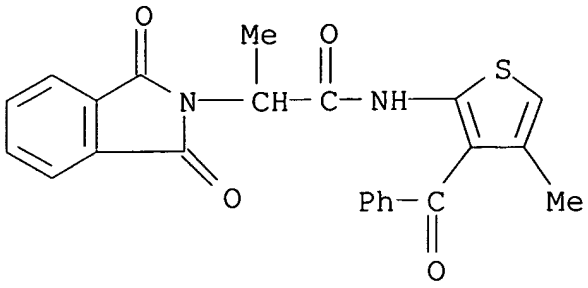
RN 40312-48-9 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-(3-benzoyl-4,5,6,7-tetrahydrobenzo[b]thien-2-yl)-1,3-dihydro-1,3-dioxo-.alpha.-phenyl- (9CI) (CA INDEX NAME)



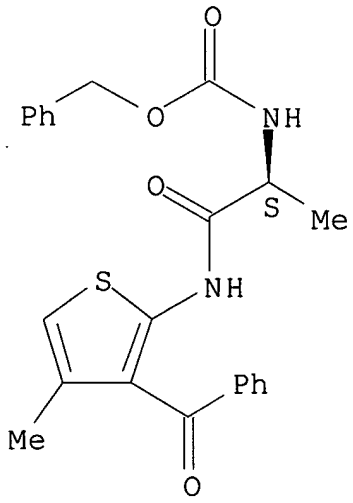
RN 40312-49-0 ZCAPLUS

CN 2H-Isoindole-2-acetamide, N-(3-benzoyl-4-methyl-2-thienyl)-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)



RN 56416-49-0 ZCAPLUS
CN Carbamic acid, [2-[(3-benzoyl-4-methyl-2-thienyl)amino]-1-methyl-2-oxoethyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **40312-47-8P 40312-48-9P 40312-49-0P**
56416-49-0P
(prepn. of)

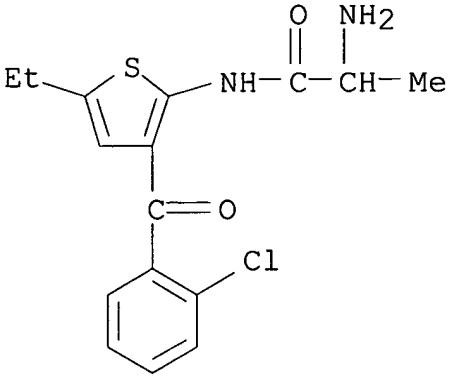
L20 ANSWER 26 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1975:97928 Document No. 82:97928 Thiophenes. Nakanishi, Michio; Tahara, Tetsuji; Araki, Kazuhiko; Shiroki, Masami (Yoshitomi Pharmaceutical Industries, Ltd.). Jpn. Tokkyo Koho JP 49016861 B4 19740425 Showa, 4 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 1970-71081 19700812.
GI For diagram(s), see printed CA Issue.
AB Twenty-four thiophene derivs. [I, R = Ph, C6H4Cl-p, C6H4CF3-m, C6H4Cl-o, C6H4OMe-o, C6H4Me-o etc., R1 = Me, Pr, Et, Bu; R2 = Me, H;

or R1R2 = (CH2)4, CH2CHMeCH2CH2, (CH2)3, (CH2)5; R3 = H, Me] were prepd. from the corresponding halo deriv. (II) and NH3. E.g. II (R = C6H4Cl-o, R1 = Et, R2 = H, R4 = I) (20 g) in 50 ml CH2Cl2 and 5 ml MeOH was treated with NH3 in the cold 2 hr to give 11.7 g I (R = C6H4Cl-o, R1 = Et, R2 = R3 = H).

IT **54861-08-4P**
(prepn. of)

RN 54861-08-4 ZCAPLUS

CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-5-ethyl-2-thienyl]- (9CI) (CA INDEX NAME)



IT **54861-08-4P**
(prepn. of)

L20 ANSWER 27 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN

1975:97927 Document No. 82:97927 Thiophene derivatives. Nakanishi, Michio; Araki, Kazuhiko; Tahara, Tetsuji; Shiroki, Masami (Yoshitomi Pharmaceutical Industries, Ltd.). Jpn. Tokkyo Koho JP 49016860 B4 19740425 Showa, 3 pp. (Japanese). CODEN: JAXXAD. APPLICATION: JP 1970-67441 19700731.

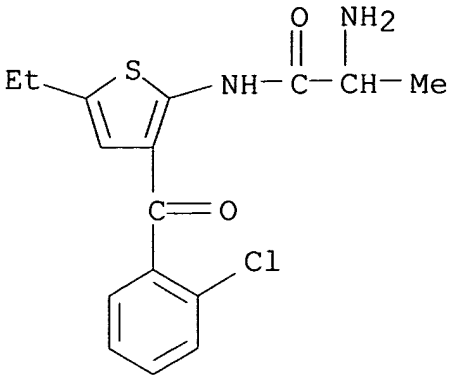
GI For diagram(s), see printed CA Issue.

AB Twenty-two (aminoacetamido)thiophenes [I, R = Ph, C6H4Cl-o, C6H4Cl-p, C6H4Cl-m, C6H4OMe-p, C6H4CF3-m, etc.; R1 = Me, H; R2 = Me, Et, Bu, Me2CH, Pr; or R1R2 = (CH2)4, (CH2)5] were prepd. by treating the corresponding azido deriv. (II) with 30% HBr in HOAc. E.g., 5 g II (R = Ph, R1 = H, R2 = Et) was treated with 50 ml 30% HBr-HOAc for 1 hr to give 5.1 g I (R = Ph, R1 = H, R2 = Et).

IT **54861-08-4P**
(prepn. of)

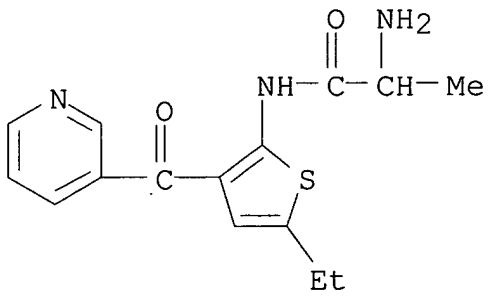
RN 54861-08-4 ZCAPLUS

CN Propanamide, 2-amino-N-[3-(2-chlorobenzoyl)-5-ethyl-2-thienyl]- (9CI) (CA INDEX NAME)



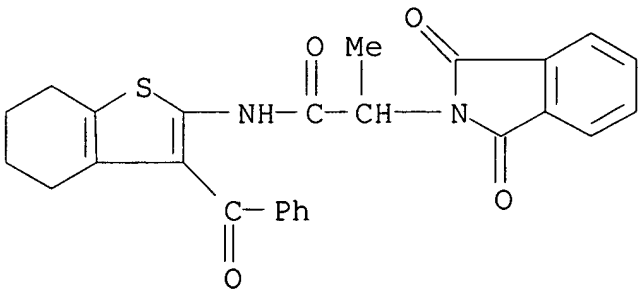
IT **54861-08-4P**
(prepn. of)

L20 ANSWER 28 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1973:431913 Document No. 79:31913 Pyridinecarbonylthiophene derivatives. Nakanishi, Michio; Shiroki, Masami; Tahara, Tetsuya; Araki, Kazuhiko (Yoshitomi Pharmaceutical Industries, Ltd.). Jpn. Kokai Tokkyo Koho JP 48018283 19730307 Showa, 3 pp. (Japanese). CODEN: JKXXAF. APPLICATION: JP 1971-53421 19710716.
GI For diagram(s), see printed CA Issue.
AB The title compds. (I), antipyretic and antiinflammatory drugs, were prepd. E.g., 5 g 2-chloroacetylamino-3-(2-pyridinylcarbonyl)-5-ethylthiophene in CHCl3 was treated with NH3 in the presence of NaI in MeOH to give 3.7 g I (R1 = R3 = R4 = H, R2 = Et, pyridyl = 2-pyridyl). Among 7 more I similarly prepd. were the following (R1, R2, R3, R4, and pyridyl given): H, Et, H, H, 3-pyridyl; Me, Me, H, H, 3-pyridyl; H, Et, H, Me, 3-pyridyl; H, Et, Me, H, 3-pyridyl; R1R2 = (CH2)4, H, H, 2-pyridyl.
IT **41979-85-5P**
(prepn. of)
RN 41979-85-5 ZCAPLUS
CN Propanamide, 2-amino-N-[5-ethyl-3-(3-pyridinylcarbonyl)-2-thienyl]- (9CI) (CA INDEX NAME)

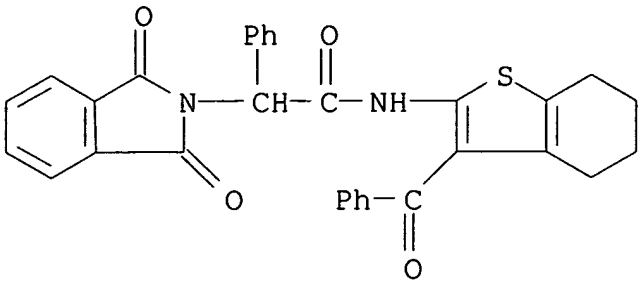


IT **41979-85-5P**
(prepn. of)

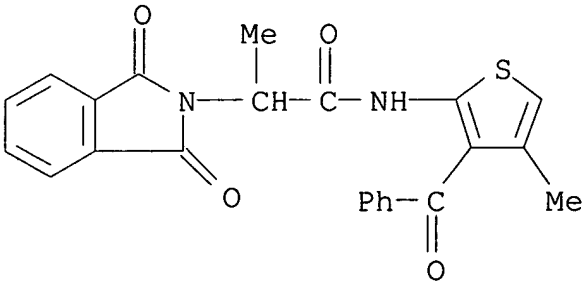
L20 ANSWER 29 OF 29 ZCAPLUS COPYRIGHT 2006 ACS on STN
1973:124645 Document No. 78:124645 Thieno[2,3-e]-1,4-diazepin-2-ones. Pelaez, Ramon Madronero; Saleta, Carlos Corral; Del Rio Zambarana, Joaquin; Calvo, Nelida Ulecia; Roldan, Cristobal Martine; Vila-Coro Barrachina, Antonio (Laboratorios Made S. A.). Ger. Offen. DE 2233457 19730222, 17 pp. (German). CODEN: GWXXBX. APPLICATION: DE 1972-2233457 19720707.
GI For diagram(s), see printed CA Issue.
AB Two title compds. (I, R = H or Cl), useful as apprehension drugs with psychostimulating effects, were prepd. by cyclization of II [R = H or m-Cl; R1 = H, R2R3 = (CH2)4] with N2H. These II and five other II [R = p-MeO, m-O2N, or p-Cl; R1 = H, Me, or Ph; R2R3 = (CH2)3 or R2 = H or Me, R3 = H] were prepd. by reaction of III, obtained from R2COCH2R3 and RC6H4COCH2CN with S, with phthalimidoacetyl chlorides.
IT **40312-47-8P 40312-48-9P 40312-49-0P**
(prepn. of)
RN 40312-47-8 ZCAPLUS
CN 2H-Isoindole-2-acetamide, N-(3-benzoyl-4,5,6,7-tetrahydrobenzo[b]thien-2-yl)-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)



RN 40312-48-9 ZCAPLUS
CN 2H-Isoindole-2-acetamide, N-(3-benzoyl-4,5,6,7-tetrahydrobenzo[b]thien-2-yl)-1,3-dihydro-1,3-dioxo-.alpha.-phenyl- (9CI) (CA INDEX NAME)



RN 40312-49-0 ZCAPLUS
CN 2H-Isoindole-2-acetamide, N-(3-benzoyl-4-methyl-2-thienyl)-1,3-dihydro-.alpha.-methyl-1,3-dioxo- (9CI) (CA INDEX NAME)



IT **40312-47-8P 40312-48-9P 40312-49-0P**
(prepn. of)